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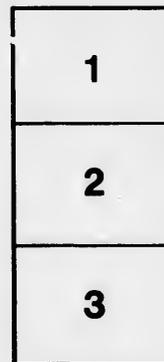
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2
3

1	2	3
4	5	6

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S. S. MACDONELL, LL.D.
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WM. GEO. DRAPER, M.A.

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REV. J. DAVISON.
REV. DR. HELLMUTH.

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Surgery and Anatomy . ... W. T. Aikins, M D.
Physiology and Comparative Anatomy. M. Barrett, M.D., M.A.
Medicine and Therapeutics .... Uzziel Ogden, M.D.

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Greek and Latin .. .. { The Rev. John McCaul, LL.D.
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Mathematics .... { J. B. Cherriman, M.A.
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Metaphysics and Ethics .... { Rev. James Beaven, D.D.
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Oriental Languages .... { J. M. Hirschfelder, Esq.
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Meteorology .... G. T. Kingston, M.A.
Civil Engineering .. .. T. C. Keefer, Esq., C.E.

GRADUATES.

Date of Admission.	D.C.L.
1850.	Croft, H. H. (*Hon.*)
1852.	Crookshank, G (*ob.*)
1847.	Lundy, Rev. F. J. (*Ad eundem*)
1852.	Smith, L. W.

LL.D.

1863.	Crooks, A., M.A.
1856.	Hurlburt, J.
1858.	Macdonell, S. S.
1860.	¹McMichael, D.
1858.	Patton, J.
1860.	²Wickson, Rev. A.

M.D.

1850.	Beaumont, W. (*Hon.*)
1848.	Bovell, J. (*Ad eundem.*)
1853.	Boyd, W.
1844.	Boys, H. (*Ad eundem.*)
1851.	Chewett, W. C.
1860.	Cronyn, J.
1853.	Desmond, H.
1851.	Eastwood, W. O.
1851.	Eastwood, C. S.
1853.	Freeman, C.
1844.	Hamilton, J. (*ob.*)
1864.	Henry, J.
1854.	Herrick, G. (*Ad eundem.*)
1844.	King J. (*ob.*)
1859.	³Miller, T.
1853.	McKenzie, M.B. (*ob.*)
1850.	Nicol, W. B.
1859.	⁴Oille, L. S.
1845.	O'Brien, L. (*Ad eundem.*)
1860.	Phillips, T. G.
1850.	Richardson. J. H.
1850.	Scott. J. (*Ad eundem.*)
1864.	Shantz, S. E.
1859.	Thorburn, J. (*Ad eundem.*)
1861.	⁵Tisdell, F. B. (*ob.*)
1859.	Turner, H., (*Ad eundem.*)
1859.	Walker, N. O.
1862.	Wanless, J.

1. Medallist in Metaphysics and Ethics.
2. Gold Medallist in Classics.
3. Silver Medallist.
4. Gold Medallist.
5. Silver Medallist.

Date of Admission.	M.D.
1853.	Winer, W.
1856.	Woodruff, W.

M.A.

1849.	Baldwin, Rev. E.
1857.	Barber, G. A. (*ob.*)
1853.	Barrett, M.
1845.	Barron, F. W.
1858.	Blake, D. E.
1857.	Boulton, J. F.
1858.	¹Bowlby, W. H.
1850.	Boyd, J.
1861.	²Boyd, J. A.
1856.	Boyd, W. T.
1856.	³Brown, J.
1860.	Cameron, H. (*Ad eundem.*)
1856.	Cambie, C. (*Ad eundem.*)
1858.	⁴Cattenach, A. J.
1854.	⁵Clark, A. M.
1858.	Craigie, W.
1864.	⁶Cooper, G.
1857.	⁷Crombie, E.
1858.	⁸Crombie, M. M.
1853.	⁹*Crooks, A.*
1849.	*Crookshank, G.* (*ob.*)
1850.	Draper, W. G.
1853.	¹⁰Eliot. C. F.
1857.	¹¹English, C. E.
1860.	¹²Fitch, B. F.
1857.	¹³Fitzgerald, E.
1858.	Francis, W. S.
1861.	¹⁴Fraser, J. T.

1. Jameson Medallist.
2. Gold Medallist in Modern Languages.
3. Gold Medallist in Mathematics, and Silver Medallist in Ethics.
4. Gold Medallist in Modern Languages, and Jameson Medallist.
5. Gold Medallist in Classics, and Jameson Medallist.
6. Silver Medallist in Classics.
7. Gold Medallist in Classics.
8. Gold Medallist in Classics.
9. Gold Medallist in Classics, and Silver Medallist in Metaphysics and Ethics.
10. Silver Medallist in Ethics.
11. Silver Medallist in Ethics.
12. Silver Medallist in Modern Languages.
13. Gold Medallist in Mathematics and Natural Philosophy.
14. Gold Medallist in Classics.

GRADUATES—*Continued.*

Date of Admission.	M.A.
1854.	[15]Frisby, E.
1864.	[16]Gibson, J. Morison.
1848.	Grasett, Rev. E.
1863.	Hatton, J. C.
1850.	[1]Helliwell, J.
1859.	Hill, Rev. G.
1859.	Hodgins, T. H.
1860.	[2]Holcomb, J. W.
1864.	[3]Hubbert, J.
1859.	Hume, Rev. R.
1862.	Hunter, J. H.
1849.	[4]Jessopp, Rev. H. B.
1858.	Jones, C.
1860.	[5]Kerr, W. H. C.
1860.	[6]Kennedy, G.
1858.	[7]Kingsmill, N.
1857.	Lawrason, W. L.
1848.	Lewis, I.
1854.	Light, R. N.
1845.	Lightburne, S.
1859.	Litton, J. L. (*Ad eundem.*)
1864.	[8]Loudon, J.
1849.	*Macdonell, S. S.*
1858.	Macnabb, A.
1856.	[9]Marling, S. A.
1858.	Montgomery, Rev. D. E. (*Ad [eundem.*)
1854.	Morris, J. H.
1859.	[10]Moss, T.
1850.	Murray, Rev. R. (*ob.*)
1857.	[11]McGregor, C. J.
1856.	McKeown, J.

Date of Admission.	M.A.
1850.	McLean, T. A.
1863.	[1]McLellan, J. A.
1860.	*McMichael D.*
1864.	[2]McMurrich, W. B.
1864.	[3]McNish, N.
1858.	*Oille, L. S.*
1859.	Paul, C. D.
1856.	[4]Peterson, H. W.
1845.	Ramsay, W.
1862.	Reeve, W. A.
1848.	[5]Roaf, J.
1857.	Ryerson, E. F.
1861.	Sampson, D. A.
1858.	[1]Sanderson, Rev. J. E.
1848.	[6]Stennett, Rev. W.
1854.	[7]Sullivan, R.
1858.	Tassie, W.
1856.	Taylor, T. W. (*Ad eundem.*)
1859.	*Tisdell, F. B.* (*ob.*)
1859.	Turpin, J. (*Ad eundem.*)
1859.	[8]*Walker. N.* O.
1860.	Waters, D.
1858.	Watts, W. A. (*Ad eundem.*)
1848.	Wedd, W.
1849.	Westropp, R. G. (*Ad eundem.*)
1850.	[9]*Wickson, Rev. A.*
1863.	Willson, A. L.
1857.	Windeat, J. (*Ad eundem.*)
1864.	Withrow, W. H.
1864.	[10]Woods, S.

B.C.L.

1854.	*Boyd, J.*
1851.	*Crooks, A.*
1847.	*Lewis, I.*

15. Silver Medallist in Mathematics.
16. Silver Medallist in Classics, and in Modern Languages, Prizeman in Oriental Languages, and Prince's Prizeman.
1. Gold Medallist in Classics.
2. Silver Medallist in Metaphysics, &c.
3. Silver Medallist in Natural Sciences.
4. Gold Medallist in Classics.
5. Gold Medallist in Classics.
6. Gold Medallist in Metaphysics, &c.
7. Silver Medallist in Classics.
8. Gold Medallist in Mathematics.
9. Gold Medallist in Classics, and Chancellor's Medallist for Evidences.
10. Gold Medallist in Classics, Mathematics and Modern Languages.
11. Gold Medallist in Mathematics and in Natural Philosophy.

1. Silver Medallist in Mathematics and in Metaphysics.
2. Gold Medallist in Natural Sciences.
3. Gold Medallist in Classics.
4. Silver Medallist in Ethics.
5. Silver Medallist in Natural Philosophy.
6. Jameson Medallist, and Medallist in Metaphysics and in Evidences.
7. Gold Medallist in Metaphysics, &c., and Silver Medallist in Mod. Languages.
8. Gold Medallist in Natural Sciences.
9. Vide ante.
10. Gold Medallist in Classics.

GRADUATES—*Continued.*

Date of Admission.	M.A.	Date of Admission.	M.A.
1854.	[15]Frisby, E.	1850.	McLean, T. A.
1864.	[16]Gibson, J. Morison.	1863.	[1]McLellan, J. A.
1848.	Grasett, Rev. E.	1860.	*McMichael D.*
1863.	Hatton, J. C.	1864.	[2]McMurrich, W. B.
1850.	[1]Helliwell, J.	1864.	[3]McNish, N.
1859.	Hill, Rev. G.	1858.	*Oille, L. S.*
1859.	Hodgins, T. H.	1859.	Paul, C. D.
1860.	[2]Holcomb, J. W.	1856.	[4]Peterson, H. W.
1864.	[3]Hubbert, J.	1845.	Ramsay, W.
1859.	Hume, Rev. R.	1862.	Reeve, W. A.
1862.	Hunter, J. H.	1848.	[5]Roaf, J.
1849.	[4]Jessopp, Rev. H. B.	1857.	Ryerson, E. F.
1858.	Jones, C.	1861.	Sampson, D. A.
1860.	[5]Kerr, W. H. C.	1858.	[1]Sanderson, Rev. J. E.
1860.	[6]Kennedy, G.	1848.	[6]Stennett, Rev. W.
1858.	[7]Kingsmill, N.	1854.	[7]Sullivan, R.
1857.	Lawrason, W. L.	1858.	Tassie, W.
1848.	Lewis, I.		

GRADUATES—*Continued.*

Date of Admission.	B.C.L
1847.	*Roaf, J.*
1851.	¹Stinson, E. (*ob.*)

LL.B.

1863.	Begue, T. H.
1860.	Benson, R. L.
1861.	Bethune, J.
1850.	Blain, D.
1861.	Boys, W.
1858.	²*Bowlby, W. H.*
1860.	Bowlby, J. W.
1860.	Cochrane, S. H.
1859.	*Crombie, M. M.*
1860.	Cronyn, V.
1862.	Cross, J. F.
1860.	Curran, J.
1861.	Denison, G. P.
1863.	Denroche, E. J.
1861.	Douglas, W.
1864.	Donaldson, J.
1864.	Duggan, G. F.
1858.	³*English, C. E.*
1861.	English, L.
1864.	Farewell J. E.
1858.	*Fitzgerald, E.*
1860.	Foster, W. A.
1860.	Ham, J. V.
1860.	Hancock, J. W.
1858.	Hodgins, T.
1860.	Hodgins, J. G.
1862.	Holcomb, J. W.
1864.	⁴Idington, J.
1864.	Joseph, J. F.
1864.	Kennedy, G.
1859.	Laird, W. P.
1864.	Lennox, D.
1860.	⁵Livingstone, J.
1862.	Marling, A.
1863.	Meredith, W. R.
1861.	Miller, W. N.

1. Gold Medallist.
2. Gold Medallist.
3. Silver Medallist.
4. Gold Medallist.
5. Silver Medallist

Date of Admission.	LL.B.
1863.	Moore, G. E.
1858.	McCaughey, J.
1864.	McDonald, J. F.
1861.	O'Brien, W. L.
1861.	O'Gara, M.
1862.	Osler, B. B.
1860.	Papps, G. S.
1862.	Penton, E.
1862.	Read, F. A.
1861.	Robertson, H.
1858.	¹*Sampson, D. A.*
1859.	Sisson, J.
1862.	Smith, J. R.
1864.	Smith, G. Y.
1861.	²Smith, R.
1863.	Snelling, R.
1860.	³Spencer, T. H.
1859.	Stanton, W. I.
1861.	Stayner, F. H.
1861.	Stephens, R. P.
1862.	Stewart, H. D.
1862.	Stuart, A. H.
1862.	Upper, M. C.
1860.	Wood, S. G.
1862.	Wood, S. G. (*ob.*)

M.B.

1858.	⁴Aikins, M. H.
1859.	⁵Barnhart, C. E.
1860.	⁶Bascom, J.
1864.	Bell, W. H.
1861.	Bell, J.
1862.	⁷Bolster, J.
1862.	Cascaden, J.
1864.	Constantinides, P.
1863.	Coverton, W. H.
1863.	Dack, T. B. N.
1862.	⁸DeGrassi, G. P.

1. Silver Medallist.
2. Silver Medallist.
3. Silver Medallist.
4. Silver Medallist.
5. Gold Medallist.
6. Gold Medallist.
7. Gold Medallist.
8. Gold Medallist.

GRADUATES—*Continued.*

Date of Admission.	M.B.
1864.	Eby, A.
1862.	Eckhardt, T. B.
1861.	Elliott, J.
1857.	[1]Francis, W. S.
1864.	Fulton, J.
1864.	Harley, J.
1864.	Kelly, M. J.
1859.	[2]King, J.
1864.	Langs, M. S.
1860.	[3]Martyn, DeW. H.
1860.	[4]Morton, E. D.
1863.	McAlpine, D. L.
1863.	McCallum, J.
1863.	McCool, D. B.
1863.	McKay, W.
1864.	[5]McLaughlin, J. W.
1864.	Newman, J. B.
1864.	Nicol, H.
1860.	[6]Ogden, W. W.
1863.	Orton, R.
1860.	[7]Playter, E.
1861.	Pollock, D. J.
1864.	Potts, R.
1863.	[8]Ramsay, S. F.
1864.	Sill, A.
1864.	Sinclair, L. C.
1863.	Stewart, J. W.
1861.	Tempest, W.
1864.	Thom, J. C.
1864.	Tisdale, J. C.
1863.	Trenor, J. R
1864.	Vail, C. L.
1864.	Whiteside, W. N.
1864.	Winn, T. B.

B.A.

1854.	Adams, G.
1853.	[9]Alma, E. J. (*ob*)

1. Silver Medallist.
2. Silver Medallist.
3. Silver Medallist.
4. Silver Medallist.
5. Gold Medallist.
6. Silver Medallist.
7. Silver Medallist.
8. Gold Medallist.
9. Medallist in Metaphysics, and Jameson Medallist

Date of Admission.	B.A.
1859.	Appelbe, R. S.
1850.	[1]Armour, J. D.
1854.	[2]Bayley, R.
1845.	Beadle, D. W. (*ad eundem.*)
1864.	Bell, J. W.
1858.	Bernard, R.
1845.	Bethune, N.
1853.	Bettridge, W.
1858.	Blake, S. H.
1845.	Boulton, H. J.
1848.	Boulton, J.
1862.	[3]Buchan, J. M.
1864.	Buchan, H. E.
1853.	Bull, S. J.
1857.	Bull, T. H.
1857.	[4]Burns, N.
1864.	[5]Connor, J. W.
1864.	[6]Craig, T. D.
1862.	[7]Crawford, W. G.
1849.	Dack, T. B.
1858.	DesVeux, G. W.
1845.	Dixon, Rev. A.
1857.	Dormer, G. (*ad eundem.*)
1849.	Eastwood, W. O.
1850.	[8]Evans, G. M.
1864.	Ferguson, J.
1862.	[9]Fisher, J.
1864.	Fleming, W. B.
1857.	*Francis, W. S.*
1851.	Freer, C.
1850.	Gage, G. L.
1848.	Geddes, Rev. G.
1862.	Gibbon, H. F. H.
1862.	[10]Gibson, Rev. J. Monro.

1. Gold Medallist in Classics.
2. Silver Medallist in Natural Philosophy.
3. Silver Medallist in Modern Languages.
4. Silver Medallist in Natural Sciences.
5. Silver Medallist in Classics.
6. Gold Medallist in Metaphysics.
7. Silver Medallist in Classics.
8. Medallist in Metaphysics, and in Evidences.
9. Silver Medallist in Mathematics.
10. Gold Medallist in Modern Languages, Metaphysics, &c., and Prince's Prizeman.

GRADUATES—*Continued.*

Date of Admission.	M.B.	Date of Admission.	B.A.
1864.	Eby, A.	1859.	Appelbe, R. S.
1862.	Eckhardt, T. B.	1850.	[1]Armour, J. D.
1861.	Elliott, J.	1854.	[2]Bayley, R.
1857.	[1]Francis, W. S.	1845.	Beadle, D. W. (*ad eundem.*)
1864.	Fulton, J.	1864.	Bell, J. W.
1864.	Harley, J.	1858.	Bernard, R.
1864.	Kelly, M. J.	1845.	Bethune, N.
1859.	[2]King, J.	1853.	Bettridge, W.
1864.	Langs, M. S.	1858.	Blake, S. H.
1860.	[3]Martyn, DeW. H.	1845.	Boulton, H. J.
1860.	[4]Morton, E. D.	1848.	Boulton, J.
1863.	McAlpine, D. L.	1862.	[3]Buchan, J. M.
1863.	McCallum, J.	1864.	Buchan, H. E.
1863.	McCool, D. B.	1853.	Bull, S. J.
1863.	McKay, W.	1857.	Bull, T. H.
1864.	[5]McLaughlin, J. W.	1857.	[4]Burns, N.
1864.	Newman, J. B.	1864.	[5]Connor, J. W.
1864.	Nicol, H.	1864.	[6]Craig, T. D.

GRADUATES—*Continued.*

Date of Admission.	B.A.
1861.	Gillespie, A.
1850.	[1]Grant, A. J.
1861.	[2]Grant, A.
1861.	[3]Grant, G.
1858.	Graydon, S. (*Ad eundem.*)
1860.	Green, G.
1864.	Grover, T.
1862.	Hagar, C.
1845.	Hagerman, J. T.
1864.	[4]Harbottle, R.
1863.	Hector, A.
1864.	Hill, R.
1848.	Hudspeth, T. A. (*ob.*)
1853.	[5]Huggard, J. T.
1861.	Hunter, J. H.
1848.	*Hurlburt, J.*
1850.	Hurlburt, H.
1845.	Jones, E. C.
1858.	Jones, H. C. (*Ad eundem.*)
1864.	Keefer, W. N.
1864.	King, J.
1849.	Kingsmill, J. J.
1863.	[6]Lafferty, A. M.
1868.	[7]Le Sueur, W.
1862.	[8]Livingstone, R. T.
1849.	Loring, G. T. (*ob.*)
1861.	Lount, S.
1864.	Macallum, A.
1845.	[9]Marsh, Rev. J. W.
1848.	[10]Marsh, Rev. T. W. (*ob.*)
1856.	Matheson, T. G.
1856.	[11]Matheson, R.
1853.	Meudell, W.
1858.	Milroy, W.

Date of Admission.	B.A.
1859.	[1]Mitchell, J. L.
1863.	[2]Mulock, W.
1859.	[3]McDougall, J. L.
1859.	Monsarrat, N.
1857.	McDermid, P.
1864.	[4]McMillan, J.
1862.	McFayden, C.
1861.	McGee, R.
1849.	[5]McKenzie, Rev. J. G. D.
1849.	*McKenzie, M. B. (ob.)*
1861.	[6]McMurchy, A.
1858.	McNaughton, T.
1862.	[7]McWilliam, W.
1863.	[8]McWilliams, W. G.
1860.	[9]Ogden, I. O. (*ob.*)
1863.	[10]Oldright, W.
1857.	[11]Oliver, W.
1861.	[12]Ormiston, D.
1864.	Patteson, T. C. (*Ad eundem.*)
1857.	Preston, Rev. J. A.
1857.	[13]Rattray, W. J.
1862.	[14]Reeve, R. A.
1851.	[15]Robarts, Rev. T. T.
1864.	[16]Robertson, T. J.
1862.	Roger, W. M.
1861.	Ross, J. B.
1864.	Rossin, J.
1845.	[17]Robinson, C.
1860.	Rock, W.
1857.	[18]Ross, J.

1. Gold Medallist in Natural Sciences.
2. Gold Medallist in Modern Languages.
3. Gold Medallist in Mathematics, and Silver Medallist in Modern Languages.
4. Silver Medallist in Metaphysics, &c., and Prince's Prizeman.
5. Silver Medallist in Evidences.
6. Silver Medallist in Mathematics.
7. Silver Medallist in Metaphysics.
8. Silver Medallist in Metaphysics.
9. Gold Medallist in Metaphysics.
10. Gold Medallist in Modern Languages.
11. Gold Medallist in Natural Sciences.
12. Silver Medallist in Mathematics.
13. Gold Medallist in Metaphysics.
14. Silver Medallist in Natural Sciences.
15. Medallist in Metaphysics.
16. Silver Medallist in Mathematics.
17. Jameson Medallist.
18. Gold Medallist in Modern Languages.

1. Jameson Medallist.
2. Gold Medallist in Natural Sciences and Silver Medallist in Metaphysics, &c.
3. Gold Medallist in Metaphysics, &c., and Prizeman in Oriental Languages.
4. Silver Medallist in Natural Sciences.
5. Gold Medallist in Classics.
6. Silver Medallist in Classics and Mathematics.
7. Silver Medallist in Classics.
8. Silver Medallist in Metaphysics, &c.
9. Silver Medallist in Evidences.
10. Silver Medallist in Evidences.
11. Gold Medallist in Natural Sciences.

GRADUATES—*Continued.*

Date of Admission.	B.A.	Date of Admission.	B.A.
1860.	Ross, D. W.	1861.	[1]Thom, J. H.
1864.	[1]Rutledge, J.	1845.	Thomson, J. E.
1863.	[2]Scott, T. H.	1854.	Trew, N. M.
1860.	Scott, W. H.	1861.	Turnbull, J.
1864.	Seath, J. A. (*Ad eundem.*)	1861.	[2]Tyner, R. J. (*ob.*)
1864.	[3]Seymour, F. E.	1862.	[3]Tytler, W.
1848.	Shaw, J. (*ob.*)	1856.	Unsworth, R.
1864.	Sharpe, W.	1864.	[4]Vandersmissen, W. H.
1860.	[4]Sinclair, W.	1845.	Vankoughnet, B. F. (*ob.*)
1857.	Smith, J. F.	1854.	[5]Wells, R. M.
1864.	[5]Snider, E. F.	1860.	White, J.
1864.	Spotten, H. B.	1864.	[6]Wilson, J. S.
1845.	Stanton, J.	1849.	*Winer, W.*
1849.	[6]Stinson, E. (*ob.*)	1853.	Woodruff, W.
1862.	Strang, H. I.	1863.	[7]Wright, T. W.
1859.	[7]Tassie, H.		
1858.	Thom, Rev. J.		

1. Silver Medallist in Mathematics.
2. Silver Medallist in Modern Languages.
3. Gold Medallist in Modern Languages.
4. Silver Medallist in Natural Sciences.
5. Gold Medallist in Natural Sciences.
6. Silver Medallist in Natural Philosophy.
7. Silver Medallist in Classics.

1. Silver Medallist in Mathematics.
2. Chancellor's Medallist for Evidences.
3. Gold Medallist in Natural Sciences.
4. Silver Medallist in Classics.
5. Jameson Medallist, and Silver Medallist in Ethics.
6. Silver Medallist in Mathematics.
7. Gold Medallist in Mathematics.

DIPLOMAS IN CIVIL ENGINEERING.

1851. Robertson, C. F. (Prizeman.)
1862. Irwin, B.
1863. Bellairs, W. G. (Prizeman.)

DIPLOMAS IN AGRICULTURE.

1860. Farewell, J. C. (Prizeman.)
1862. Forneri, C. C.
1862. Thompson, J. B. (Prizeman.)

UNDERGRADUATES.

FACULTY OF LAW.

Date of Admission.		Date of Admission.	
1857.	Adams, R. W.	1857.	Lapsley, W.
1859.	Alma, P.	1864.	Lash, Z. A.
1864.	Betts, J.	1864.	Lillie, J. A.
1864.	Brough, C. A.	1864.	Masterson, C. M.
1860.	Burnham, J.	1860.	McCaul, G. L.
1856.	Cawthra, H.	1859.	McGlashan, J.
1857.	Clarke, W.	1858.	McKelcan, F.
1859.	Clarke, A. A.	1860.	McKellar, P. D.
1860.	D'Aubigny, P.	1859.	McKenzie, W. L.
1857.	Dewar, J.	1859.	McLennan, D.
1861.	Dixon, T.	1857.	McNaughton, A. T.
1862.	Duncombe, D. L.	1860.	Peebles, J.
1859.	Dunn, J. M.	1862.	Preston, J.
1860.	Freel, E.	1863.	Preston, D. H.
1862.	Frost, A.	1864.	Richardson, W.
1857.	Ghent, S. H.	1856.	Scott, A. F.
1861.	Gilbert, J. H.	1860.	Selby, S. B. J.
1861.	Glassco, J. T.	1857.	Shaw, G. C.
1864.	Green, T. J. C.	1861.	Smith, A. F.
1859.	Hamilton, J. C.	1861.	Smith, R. W.
1857.	Howell, A.	1864.	Smith, D. S.
1857.	Jones, H. C.	1856.	Sullivan, W. B.
1863.	Kelly, M. J.	1864.	Sullivan, D. L.
1858.	Kerr, J. W.	1861.	Warren, E.
1859.	Kerr, W. J.	1864.	Webb, E.
1857.	Lambert, W.	1859.	Wethey, H.
1864.	Land, R. C. A.	1864.	Williams, A.

FACULTY OF MEDICINE.

1863.	Aberdein, R.	1862.	Bulmer, T. S.
1863.	Anderson, H.	1862.	Burnett, D.
1863.	Beith, A.	1862.	Burnham, E. L.
1861.	Bigelow, A.	1863.	Burns, J. H.
1863.	Bowman, J. W.	1863.	Carlyle, J.
1863.	Buchanan, C. H.	1861.	Cassady, J.

UNDERGRADUATES—*Continued.*

Date of Admission.

1864.	Cassidy. J. J.
1868.	Chapman, O. W.
1863.	Chrysler, W. H.
1863.	Clerke, C. H.
1858.	Donaldson. J. G.
1861.	DeLaHaye, A.
1861.	Douglas, C.
1864.	Douglas, J. W.
1864.	Eccles, F. R.
1858.	Farewell, J. E.
1864.	Farewell, W. G.
1862.	Fife, J. A.
1861.	Forrest, R. W.
1863.	Goodell, R. H
1862.	Gouinlock, W. C.
1863.	Grote, G. W.
1864.	Gwyn, H. C.
1863.	Harrison, F.
1861.	Henry, J.
1862.	Hodder, F. W.
1861.	Holme, J.
1862.	Holme, W. R.
1861.	Hornibrooke, E.
1863.	Howe, J.
1863.	Hughes, J.
1864.	Hughes, A. H.
1862.	Jackes, A. G.
1864.	Jacques, T.
1862.	King, R.
1863.	King, F.
1861.	Kitchen, E.
1863.	Langrill, J. A.
1863.	Lynch, J.
1861.	McCarthy, J. L. G.
1864.	McConnell, J.
1863.	McCulloch, J.
1863.	McDonald, A. E.
1864.	McFarlane, L.
1864.	McIntyre, N.
1863.	McKenna, C.
1862.	McPherson, A. G.
1862.	Mickle, W.

Date of Admission.

1862.	Miller, W. H.
1861.	Milne, W.
1864.	Montgomery, J.
1864.	Morton, W.
1861.	Munns, W.
1863.	Murray, R. G.
1864.	Newton, J. H.
1864.	Oronhyatekha.
1864.	Palmer, R. V.
1863.	Passmore, W. J.
1863.	Pentland, W. R.
1863.	Penwarden, J.
1861.	Perchard, J. P.
1864.	Quinlan, J.
1862.	Rae, F.
1858.	Ramsay, R.
1860.	Renwick, H.
1861,	Richardson, J.
1860.	Robertson, C.
1860.	Roche, A.
1863.	Ross, W.
1862.	Scholfield, D. T.
1861.	Shantz, S. E.
1861.	Sinclair, J.
1861.	Smale, S. B.
1863.	Smith, D.
1858.	Sparrow, J. W.
1860.	Standish, J.
1859.	Stinson, C. W.
1862.	Stubbs, J.
1860.	Sutton, H. H.
1863.	Tempest, W. F.
1864.	Tennant.
1863.	Thorburn, R.
1864.	Tyrwhitt, J.
1858.	Wall, J.
1863.	Wallace. J.
1861.	White, T.
1861.	Wilkins, G.
1864.	Workman, J.
1856.	Young, F. H.

UNIVERSITY OF TORONTO.

UNDERGRADUATES—*Continued.*

FACULTY OF ARTS.

Date of Admission.		Date of Admission.	
1860.	Albert Edward, P. (*Ad*	1862.	Byers, M.
1863.	Adams, J. [*eundem*.)	1861.	Cameron, A.
1860.	Alexander, R. H.	1858.	Campbell, A.
1864.	Amos, W.	1861.	Campbell, A. F.
1863.	Anderson, A.	1853.	Campbell, P.
1857.	Andrew, A.	1861.	Campbell, J.
1858.	Andrews, H. A.	1864.	Campbell, J.
1863.	Austin, J.	1864.	Carney, R.
1859.	Bain, W.	1858.	Carroll, W. A.
1861.	Baldwin, R.	1864.	Carruthers, G. F.
1862.	Baldwin, R. R.	1859.	Cassady, J.
1860.	Ballantyne, W. D.	1864.	Cassels, A.
1861.	Barber, R.	1861.	Cassels, W. G. P.
1861.	Barbour, W. T.	1864.	Chase, G. A.
1862.	Barker, P. M.	1861.	Chisholm, W. R.
1862.	Barron, J.	1861.	Christie A. J.
1856.	Bates, N.	1862.	Clark, H.
1860.	Bearman, E. C.	1860.	Cleary, R.
1859.	Bell, W. C.	1859.	Coleman, E.
1862.	Bell, C. W.	1863.	Connon, C. H.
1861.	Bemiss, D.	1859.	Corbett, G.
1858.	Bethune, J.	1861.	Corbould, C.
1861.	Bielby, P.	1864.	Coyne, J. H.
1864.	Brigg, E. M.	1859.	Cowan, S.
1861.	Black, D.	1860.	Croly, J. E.
1862.	Bowes, J. G.	1864.	Crozier, J.
1858.	Boys, W.	1863.	Currie, C. D.
1861.	Bowers, J. E.	1860.	Cutten, H. H.
1860.	Bigg. W. R.	1852.	Davidson, W.
1861.	Brisbin, B.	1862.	Davidson, G.
1857.	Brodie, J.	1861.	DelaMater, H.
1857.	Brown, W.	1864.	DelaMater, R. A.
1858.	Brough, R. R.	1862.	Delamere, T. D.
1864.	Bruce, J.	1862.	Denroche, H. M.
1862.	Brunel, G.	1856.	Dick, A.
1863.	Bryce, G.	1861.	Dickie, T.
1859.	Buckland, W. G.	1864.	Dickson, G.
1859.	Budd, S. A.	1858.	Dill, A.
1864.	Burnfield, G.	1860.	Dixon, A.
1858.	Burnham, G. A.	1862.	Dobson, R. L.
1862.	Butler, T. P.	1859.	Donaldson, J.

UNDERGRADUATES—*Continued.*

Date of Admission.	
1863.	Dow, J.
1863.	Dowsley, A.
1863.	Ells, W. H.
1864.	Evans, J.
1862.	Falconbridge, W. G.
1862.	Farley, P.
1861.	Ferguson, P.
1861.	Fitzgerald, W.
1864.	Fleming, R. McM.
1861.	Fletcher, J.
1863.	Forrest, W.
1864.	Foss, W. D.
1861.	Foster, S.
1863.	Galbraith, J.
1862.	Gilles, G.
1861.	Goodwillie, G. S.
1864.	Goodwillie, J. M.
1859.	Gordon, J.
1862.	Gould, J, E.
1857.	Grahame, J.
1863.	Graham, W.
1862.	Greenlees, A.
1861.	Greer, G. M.
1857.	Grierson, J. C.
1864.	Grover, T. M.
1860.	Gundy, J. R.
1859.	Hamilton, W. R.
1864.	Hamilton, A.
1859.	Hastie, A.
1863.	Hill, A. C.
1862.	Hill, H. P.
1861.	Hill, J.
1864.	Hodge, G.
1861.	Hodgson, J.
1860.	Holme, J. C.
1862.	Holmes, W. R.
1863.	Hope, R.
1860.	Hopkin, J. W.
1863.	Hudson, R. S.
1856.	Hume, H. H.
1862.	Hunter, D.
1858.	Hurlbert, J.
1860.	Jackes, C. B.

Date of Admission.	
1860.	Jackson, J. P.
1864.	Jamieson, C.
1863.	Jeffers.
1860.	Johnstone, J.
1858.	Johnson, M. M.
1860.	Jolly, J. W.
1860.	Jones, S. A.
1861.	Junor, D.
1861.	Kay, W.
1862.	Kennedy, A.
1860.	Kerr, G.
1861.	Kerr, B.
1864.	Killmaster, J.
1859.	Kilpatrick, G.
1858.	King, W. O.
1861.	King, A. McP.
1858.	Kirkland, T.
1859.	Laidlaw, R. J.
1861.	Lash, Z. A.
1859.	Lazier, S. P.
1863.	Lazier, W. D.
1859.	Ledyard, T.
1863.	Ledyard, W. E.
1860.	Lount, G.
1864.	Macdonald, W.
1860.	Magee, J.
1860.	Malcolm, J.
1861.	Malloy, W.
1862.	Mewburn, H.
1857.	Miller, A. E.
1861.	Miller, J. H.
1861.	Millar, W.
1860.	Mills, J. H.
1861.	Mitchell, G. A.
1861.	Moore, W.
1862.	Moderwell, M. C.
1861.	Morgan, J. C.
1861.	Morrison, J.
1857.	Muir, T.
1860.	Mulholland, J.
1861.	Mulholland, J. W. P.
1863.	Munro, W.
1864.	Murdoch, A.

UNDERGRADUATES—*Continued.*

Date of Admission.	
1861.	Murphy, J.
1864.	McArthur, C.
1863.	McBride, W.
1858.	McCarrol, W.
1864.	McColl, J.
1862.	McDiarmid, W.
1860.	McEwan, P. A.
1864.	McGeachy, W. (*Ad eundem.*)
1858.	McGregor, M. A.
1856.	McGrigor, J.
1858.	McGuire, T.
1861.	McInnis, W.
1861.	McInnes, D. J.
1863.	McIntosh, J.
1858.	McIntyre, W. B.
1858.	McKay, W.
1859.	McKee, R.
1858.	McKenzie, G.
1858.	McKenzie, W.
1862.	McKenzie, M.
1861.	McKinnon, A.
1858.	McLean, J.
1862.	McLennan, F.
1863.	McLennan, P.
1858.	McPherson, A. F.
1864.	Nason, W. R.
1864.	Nichols, W. L.
1857.	Northgraves, Rev. G. R.
1864.	O'Meara, C.
1861.	Orr, R.
1860.	Osborne, R. B.
1861.	Osborne, J. K.
1858.	Palmer, J. H.
1860.	Park, S.
1862.	Paterson, J. A.
1863.	Patterson, E. G.
1860.	Patton, F. L.
1864.	Paul, E.
1860.	Perchard, J. P.
1863.	Phillips, J. W.
1858.	Phillipps, H.
1859.	Platt, G.
1862.	Porter, G. H.

Date of Admission.	
1861.	Preston, J.
1863.	Pruyn, D.
1864.	Purdy, J.
1861.	Purslowe, A.
1861.	Quarry, J. J.
1861.	Rathwell, W.
1862.	Rattray, C. G.
1860.	Reynolds, R. (*Ad eundem.*)
1861.	Reazin, H.
1863.	Reesor, F. A.
1861.	Reid, D.
1861.	Reid, L. H.
1864.	Reid, W. J.
1861.	Rennelson, W. H.
1862.	Rennie, G.
1857.	Ridout, J. G.
1859.	Ridout, J.
1862.	Ridout, J.
1862.	Robertson, L. H.
1863.	Robertson, J.
1858.	Robinson, E.
1863.	Robinson, E. F.
1859.	Rollo, J. F.
1860.	Rolph, J. W.
1857.	Roseborough, A. M.
1861.	Sanson, J.
1861.	Scott, R. G.
1864.	Scott, J.
1859.	Seymour, C.
1857.	Shaw, J.
1858.	Shaw, W. J.
1863.	Shaw, A.
1862.	Sheppard, G.
1858.	Sills, O.
1864.	Sinclair, A.
1864.	Sinclair, J. E.
1870.	Small, J. S.
1861.	Smiley, J.
1859.	Smith, A.
1863.	Smythe, E. H.
1861.	Spafford, J. S.
1864.	Sparling, G. B.

UNDERGRADUATES—*Continued.*

Date of Admission.		Date of Admission.	
1859.	Squier, W. R.	1862.	Tyner, A. C.
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1864.	Stevenson, J. H.	1859.	Warren, C.
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1859.	Stewart, A.	1862.	Watt, W.
1863.	Stewart, McL.	1860.	White, J.
1860.	Stowell, J.	1859.	Wilkins, G.
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1862.	Taylor, H.	1859.	Winn, T. B.
1863.	Taylor, J.	1864.	Wismer, J. A.
1861.	Terrill, J. J.	1858.	Wood, S. G.
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1859.	Thompson, J. B.	1863.	Woodside, H. J.
1859.	Thompson, W.	1861.	Woolverton, A.
1861.	Thornburn, R.	1862.	Wright, A. H.
1860.	Thornton, R. M.	1861.	Wright, P.
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*1. Pupil of Upper Canada College. 4. Pupil of St. Thomas Grammar School.
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  3.   "   Toronto Grammar School.   6.   "   Upper Canada College.

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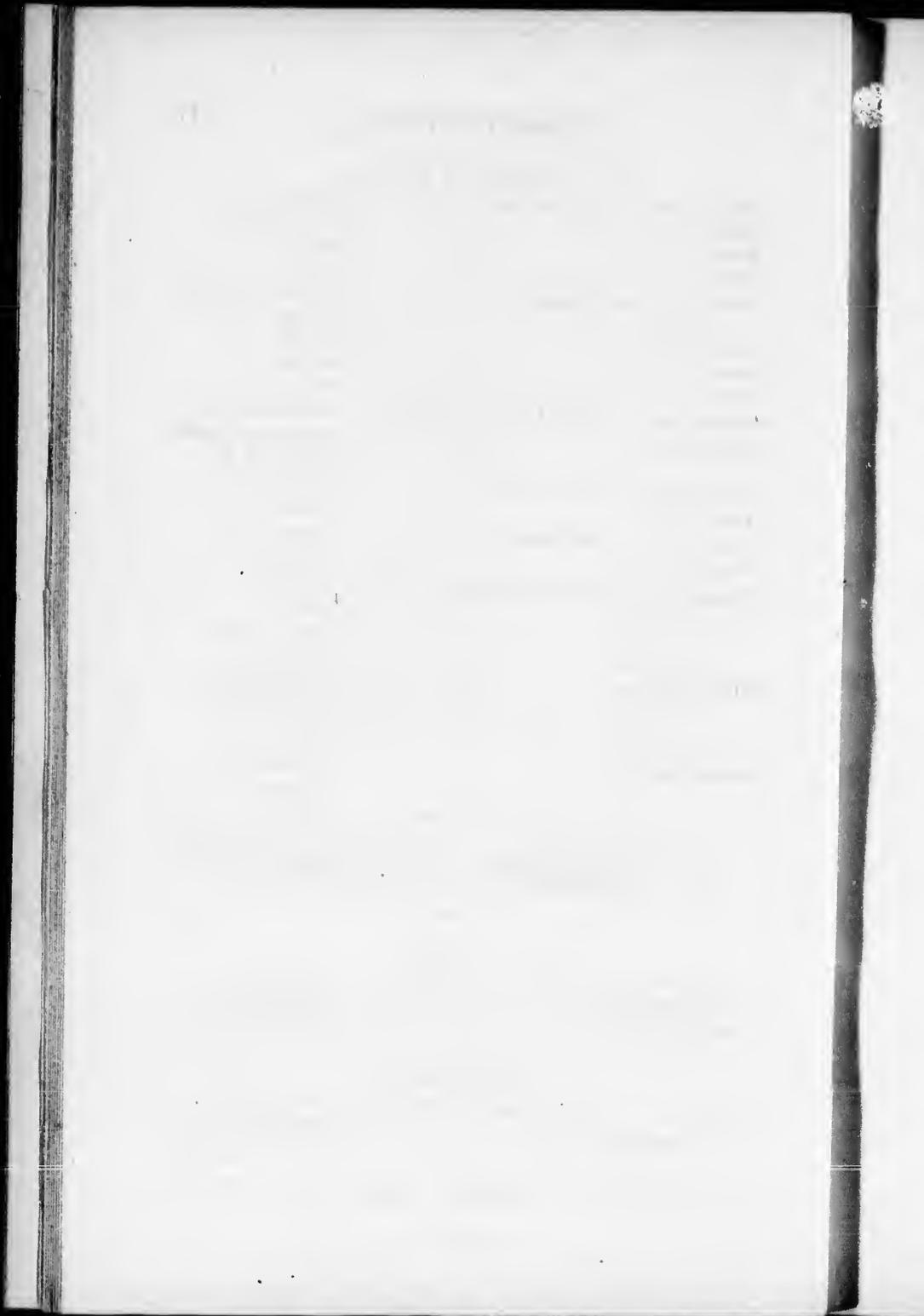
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MATRICULATION.

FACULTY OF ARTS.

GREEK.

Examiners: { REV. JOHN McCAUL, LL.D.
Thomas Moss, M.A.

I.

Translate :

Μετὰ τοῦτον ἄλλος ἀνέστη, ἐπιδεικνὺς μὲν εὐήθειαν
τοῦ τὰ πλοῖα αἰτεῖν κελεύοντος, ὥσπερ πάλιν τὸν στόλον
Κύρου μὴ ποιουμένου, ἐπιδεικνὺς δὲ ὡς εὔηθες εἴη ἡγεμόνα
αἰτεῖν παρὰ τούτου, ᾧ λυμαινόμεθα τὴν πρᾶξιν. Εἰ δὲ
καὶ τῷ ἡγεμόνι πιστεύσομεν, ᾧ ἂν Κῦρος διδῷ, τί κωλύει
καὶ τὰ ἄκρα ἡμῖν κελεύειν Κῦρον προκαταλαμβάνειν ;
Ἐγὼ γὰρ ὀκνοίην μὲν ἂν εἰς τὰ πλοῖα ἐμβαίνειν, ἃ ἡμῖν
δοίη, μὴ ἡμᾶς αὐταῖς ταῖς τριήρεσι καταδύσῃ· φοβοίμην
δ' ἂν τῷ ἡγεμόνι ᾧ δοίη, ἕπεσθαι, μὴ ἡμᾶς ἀγάγῃ ὅθεν
οὐχ οἷόν τε ἔσται ἐξελθεῖν· βουλοίμην δ' ἄν, ἄκοντος
ἀπιὼν Κύρου, λαθεῖν αὐτὸν ἀπελθών ὃ οὐ δυνατόν ἐστιν.
Ἀλλ' ἐγὼ φημι ταῦτα μὲν φλυαρίας εἶναι· δοκεῖ δέ μοι,
ἄνδρας ἐλθόντας πρὸς Κῦρον, οἵτινες ἐπιτήδειοι, σὺν
Κλεάρχῳ, ἐρωτᾶν ἐκεῖνον τί βούλεται ἡμῖν χρῆσθαι. καὶ
ἐὰν μὲν ἡ πρᾶξις ᾖ παραπλησία οἵαπερ καὶ πρόσθεν
ἐχρῆτο τοῖς ξένοις, ἕπεσθαι καὶ ἡμᾶς, καὶ μὴ κακίους
εἶναι τῶν πρόσθεν τούτῳ συναναβάντων, Ἐὰν δὲ μείζων

ἡ πρᾶξις τῆς πρόσθεν φαίνηται, καὶ ἐπιπονωτέρα, καὶ
ἐπικινδυνοτέρα, ἀξιοῦν ἢ πείσαντα ἡμᾶς ἄγειν, ἢ πεισθέντα
πρὸς φιλίαν ἀφιέναι· οὕτω γὰρ καὶ ἐπόμενοι ἂν φίλοι
αὐτῷ καὶ πρόθυμοι ἐποίμεθα καὶ ἀπιόντες ἀσφαλῶς ἂν
ἀπίοιμεν. ὅ τι δ' ἂν πρὸς ταῦτα λέγῃ ἀναγγεῖλαι δεῦρο.
ἡμᾶς δ' ἀκούσαντας πρὸς ταῦτα βουλεύεσθαι. Ἔδοξε
ταῦτα, καὶ ἄνδρας ἑλόμενοι σὺν Κλεάρχῳ πέμπουσιν,
οἳ ἠρώτων Κῦρον τὰ δόξαντα τῇ στρατιᾷ.

<div align="right">Xenophon, Anabasis, i., c. 3.</div>

1. ἄλλος. Who is conjectured to have been the speaker?
Why?

2. ἐπιδεικνύς. Give principal parts of this verb.

3. ᾧ ἂν Κῦρος δῷ. Explain the construction of ᾧ.

4. ἄκρα. Where?

5. τριήρεσι. Decline this noun in the contracted and
uncontracted forms.

6. δοίη. Give all the moods of the active voice of this
tense.

7. λαθεῖν αὐτὸν ἀπελθών. Mention some other verbs that
employ the participle in a similar manner.

8. χρῆσθαι. Explain the construction of this verb with
the accusative and the dative.

9. οἷάπερ καὶ πρότερον. On what occasion?

10. μείζων. What other form? Give degrees of compari-
son.

11. ἀξιοῦν. How governed?

12. πρὸς φιλίαν. Supply the ellipsis.

13. Parse: ποιουμένου, δῷ, ὀκνοίην, ἀγάγοι, ἐξελθεῖν, λαθεῖν,
κακίους, ἀφιέναι, ἑλόμενοι, δόξαντα.

14. Derive: πλοῖα, στόλος, τριήρης, ἄκων, ἀσφαλής.

15. State what you know of Clearchus.

II.

Translate :

Ἐπεὶ δὲ κατεπέμφθη ὑπὸ τοῦ πατρὸς σατράπης Λυδ-
ίας τε καὶ Φρυγίας τῆς μεγάλης καὶ Καππαδοκίας, στρατη-
γὸς δὲ καὶ πάντων ἀπεδείχθη, οἷς καθήκει εἰς Καστωλοῦ
πεδίον ἀθροίζεσθαι, πρῶτον μὲν ἐπέδειξεν αὑτόν, ὅτι περὶ
πλείστου ποιοῖτο, εἴ τῳ σπείσαιτο καὶ εἴ τῳ σύνθοιτο καὶ
εἴ τῳ ὑπόσχοιτό τι, μηδὲν ψεύδεσθαι. Καὶ γὰρ οὖν
ἐπίστευον μὲν αὐτῷ αἱ πόλεις ἐπιτρεπόμεναι, ἐπίστευον δ᾽
οἱ ἄνδρες, καὶ εἴ τις πολέμιος ἐγένετο, σπεισαμένου Κύρου
ἐπίστευε μηδὲν ἂν παρὰ τὰς σπονδὰς παθεῖν. Τοιγαρ-
οῦν ἐπεὶ Τισσαφέρνει ἐπολέμησε, πᾶσαι αἱ πόλεις ἑκοῦσαι
Κῦρον εἵλοντο ἀντὶ Τισσαφέρνους, πλὴν Μιλησίων· οὗτοι
δέ, ὅτι οὐκ ἤθελε τοὺς φεύγοντας προέσθαι, ἐφοβοῦντο αὐ-
τόν. Καὶ γὰρ ἔργῳ ἐπεδείκνυτο, καὶ ἔλεγεν, ὅτι οὐκ
ἄν ποτε προοῖτο, ἐπεὶ ἅπαξ φίλος αὐτοῖς ἐγένετο, οὐδ᾽ εἰ
ἔτι μὲν μείους γένοιντο, ἔτι δὲ κάκιον πράξειαν. Φαν-
ερὸς δ᾽ ἦν, καὶ εἴ τίς τι ἀγαθὸν ἢ κακὸν ποιήσειεν αὐτόν,
νικᾶν πειρώμενος· καὶ εὐχὴν δέ τινες αὐτοῦ ἐξέφερον, ὡς
εὔχοιτο τοσοῦτον χρόνον ζῆν, ἔστε νικῴη καὶ τοὺς εὖ καὶ
τοὺς κακῶς ποιοῦντας ἀλεξόμενος. Καὶ γὰρ οὖν πλεῖ-
στοι δὴ αὐτῷ, ἑνί γε ἀνδρὶ τῶν ἐφ᾽ ἡμῶν, ἐπεθύμησαν καὶ
χρήματα καὶ πόλεις καὶ τὰ ἑαυτῶν σώματα προέσθαι.
Οὐ μὲν δὴ οὐδὲ τοῦτ᾽ ἄν τις εἴποι, ὡς τοὺς κακούργους
καὶ ἀδίκους εἴα καταγελᾶν, ἀλλ᾽ ἀφειδέστατα πάντων
ἐτιμωρεῖτο.

XENOPHON, *Anabasis*, i., c. 9.

1. κατεπέμπθη, Force of κατὰ here ?

2. Καστωλοῦ πεδίον. Where situate ?

3. Φρυγίας. How subdivided ?

4. σπεισαμένου Κύρου. What is the construction ?

5. Μιλησίων. Where was this city ? Mention any
celebrated men of whom it was the birth-place.

6. προοῖτο. What is the form in common Greek ?

7. μείους. Give degrees of comparison.

8. Distinguish between καὶ εἴ and εἴ καὶ.

9. φανερός ἦν .... πειρώμενος. Explain the idiom.

10. τοσοῦτον χρόνον.   Why accusative ?

11. καταγελᾷν.   Supply the ellipsis.

12. Parse : πλείστου, σπείσαιτο, ὑπόσχοιτο, εἵλοντο, γένοιντο, πράξειαν, εἴα.

13. Mention any other historical works by Xenophon.

14. Form the comparative and superlative of : ταχὺς, ἐχθρὸς, ὀλίγος, ῥάδιος, μέγας.

LATIN.

Examiners: { REV. JOHN McCAUL, LL.D.
THOMAS MOSS, M.A.

I.

Translate:

Hæc ubi dixit, paullulum commoratus, signa canere jubet, atque instructos ordines in locum æquum deducit. Dein, remotis omnium equis, quo militibus exæquato periculo animus amplior esset, ipse pedes exercitum pro loco atque copiis instruit. Nam, uti planities erat inter sinistros montis et ab dextera rupis aspera, octo cohortis in fronte constituit, reliquarum signa in subsidio arctius collocat. Ab his centuriones, omnis lectos et evocatos, præterea ex gregariis militibus optumum quemque armatum in primam aciem subducit. C. Manlium in dextera, Fæsulanum quendam in sinistra parte curare jubet; ipse cum libertis et colonis propter aquilam assistit, quam bello Cimbrico C. Marius in exercitu habuisse dicebatur. At ex altera parte C. Antonius, pedibus æger, quod prœlio adesse nequibat, M. Petreio legato exercitum permittit. Ille cohortis veteranas, quas tumulti causa conscripserat, in fronte, post eas ceterum exercitum in subsidiis locat. Ipse equo circumiens, unumquemque nominans appellat, hortatur, rogat, ut meminerint, se contra latrones inermis, pro patria, pro liberis, pro aris atque focis suis certare. Homo militaris, quod amplius annos triginta tribunus aut præfectus aut legatus aut prætor cum magna gloria in exercitu fuerat, plerosque ipsos factaque eorum fortia noverat; ea commemorando militum animos accendebat.

SALLUST, *Catilina*, c. 59.

1. Parse *signa, pedes, ab dextera, amplius annos triginta, prælio, tumulti causa.*

2. What examples in this extract of " the ablative absolute ?"

3. Mark the quantity of the penultimate of *paullulum, deducit, collocat, colonis, nequibat, latrones.*

4. *Octo cohortis.* How many cohorts in a legion ? How was each cohort divided ?

5. *Centuriones.* What was the designation of the chief centurion of a legion ?

6. *Fæsulanum.* Where was *Fæsulæ ?*

7. *Bello Cimbrico.* Give a brief account of it.

8. *C. Antonius.* What office did he hold ? Who was his colleague ?

9. Distinguish *appello* and *nomino, prælium, pugna,* and *acies, præfectus, legatus,* and *prætor, tumultus* and *bellum.*

II.

I. Decline *filia, domus, bos, vis, iter, senex.*

2. What is meant by " apposition ?"

3. Compare *pulcher, levis, similis, parvus, nequam, benevolus.*

4. What deponent verbs govern the ablative ?

5. Conjugate *mordeo, spargo, tollo, pendo, gigno, soleo.*

6. Give a list of verbs which govern the genitive.

III.

Translate :

'Cuncta equidem tibi, Rex, fuerit quodcumque, fatebor
Vera,' inquit : 'neque me Argolica de gente negabo :
Hoc primum ; nec, si miserum fortuna Sinonem
Finxit, vanum etiam mendacemque improba finget.
Fando aliquod si forte tuas pervenit ad aures
Belidæ nomen Palamedis et inclyta fama
Gloria : quem falsa sub proditione Pelasgi
Insontem, infando indicio, quia bella vetabat,

Demisere neci ; nunc cassum lumine lugent ;
Illi me comitem et consanguinitate propinquum
Pauper in arma pater primis huc misit ab annis :
Dum stabat regno incolumis, regumque vigebat
Conciliis, et nos aliquod nomenque decusque
Gessimus.   Invidia postquam pellacis Ulixi
(Haud ignota loquor) superis concessit ab oris :
Afflictus vitam in tenebris luctuque trahebam,
Et casum insontis mecum indignabar amici.
Nec tacui demens ; et me, fors si qua tulisset,
Si patrios unquam remeassem victor ad Argos,
Promisi ultorem ; et verbis odia aspera movi.
Hinc mihi prima mali labes ; hinc semper Ulixes
Criminibus terrere novis ; hinc spargere voces
In vulgum ambiguas, et quærere conscius arma.
Nec requievit enim, donec Calchante ministro—
Sed quid ego hæc autem nequidquam ingrata revolvo ?
Quidve moror, si omnes uno ordine habetis Achivos,
Idque audire sat est ? jamdudum sumite pœnas :
Hoc Ithacus velit, et magno mercentur Atridæ.'

VIRGIL, *Æneid*, ii., vv. 77-104.

1. Parse *neci, cassum lumine, afflictus, me,* in v. 94, *terrere, velit.*

2. *Belidæ.* What is the origin of this name ? What difficulty as to quantity ?

3. *Falsa sub proditione.* Explain the meaning.

4. *Pelasgi.* Who ? Why so called ?

5. *Primis ab annis.* Of what ?

6. *Argos.* In what part of Peloponnesus ? State the other divisions.

7. Write brief notices of *Palamedes, Ulysses,* and the *Atridæ.*

8. *Calchante ministro.* By what name is the figure known ?

9. Give the laws of the quantity of final *as, es, is, os,* and *us.*
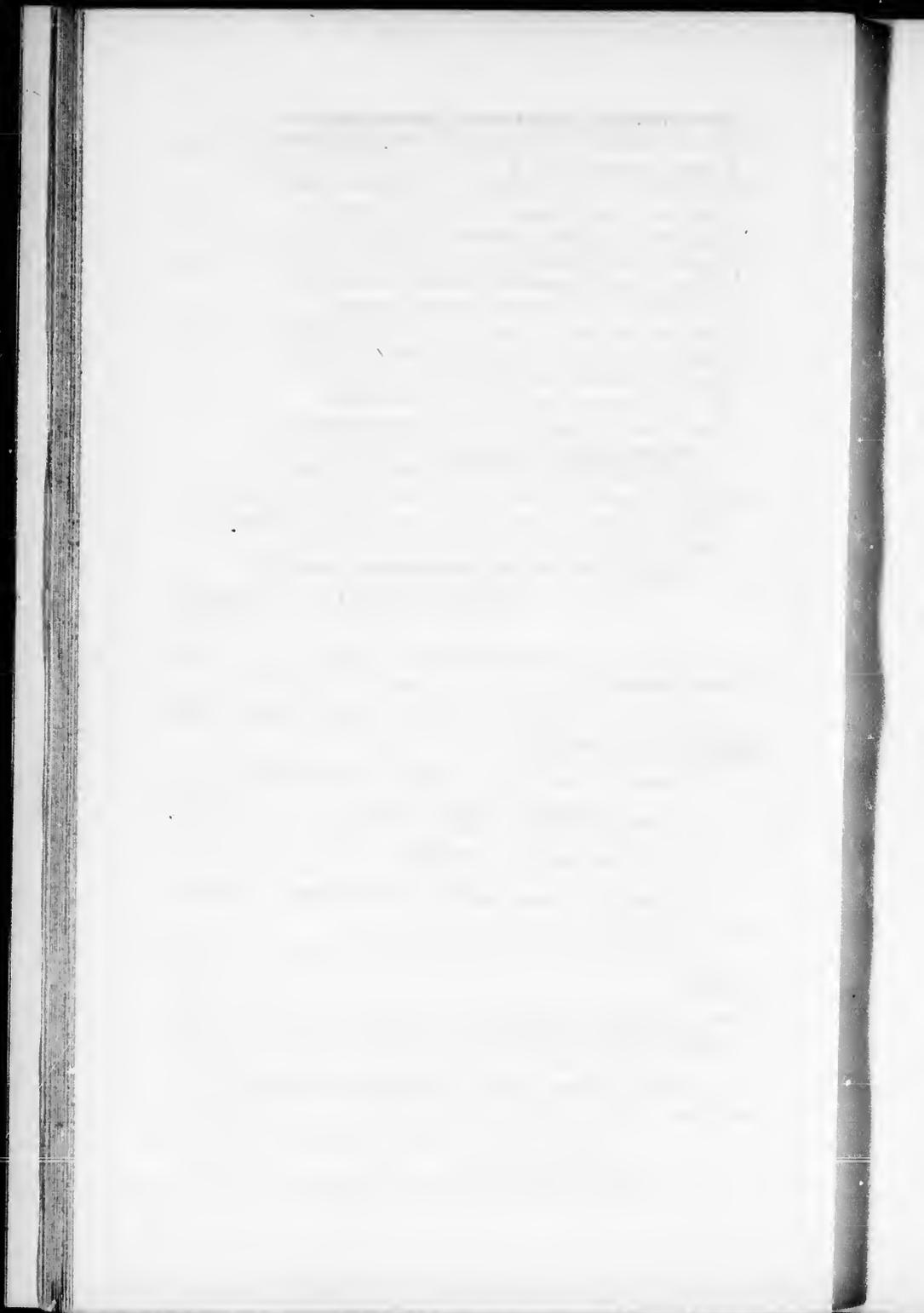
University of Toronto.

MATRICULATION.

LATIN.

HONORS AND SCHOLARSHIPS.

Examiners: { REV. JOHN McCAUL, LL.D.
Thomas Moss, M.A. }

I.

Translate :

Sic te diva potens Cypri,
  Sic fratres Helenæ, lucida sidera,
Ventorumque regat pater
  Obstrictis aliis præter Iapyga,
Navis, quæ tibi creditum
  Debes Virgilium, finibus Atticis
Reddas incolumem, precor,
  Et serves animæ dimidium meæ.
Illi robur et æs triplex
  Circa pectus erat, qui fragilem truci
Commisit pelago ratem
  Primus nec timuit præcipitem Africum
Decertantem Aquilonibus,
  Nec tristes Hyadas nec rabiem Noti,
Quo non arbiter Hadriæ
  Major, tollere seu ponere vult freta.
Quem mortis timuit gradum,
  Qui siccis oculis monstra natantia,

Qui vidit mare turgidum et
　　Infames scopulos Acroceraunia?
Nequicquam Deus abscidit
　　Prudens Oceano dissociabili
Terras, si tamen impiæ
　　Non tangenda rates transiliunt vada.

<div align="right">HORACE, Odes, i, 3, vv. 1-24.</div>

1. How are the following words governed—*te, Cypri, tibi, finibus, illi, Aquilonibus?*

2. State the geographical position of *Cyprus, Attica, Hadria, Acroceraunia.*

3. *Fratres Helenæ; ventorum pater.* What were their names?

4. Give the Latin designations of the winds from eight points of the compass.

5. *Reddas.* Why in subjunctive?

6. Write a brief account of the *Argo.*

7. *Hyadas.* What was their Latin name?

8. Give scales of the metres in this ode.

9. Give scales of the metres in the Alcaic stanza.

II.

1. Distinguish *oblītus* and *oblĭtus, sēde* and *sĕde, vincĭtur* and *vincĭtur, nōta* and *nŏta, lābor* and *lăbor, jacĕrent* and *jacĕrent.*

2. What verbs take a double accusative after them?

3. Distinguish *os, oris* and *os, ossis, vas, vadis* and *vas, vasis, carcer* and *carceres, littera* and *litteræ, opera* and *operæ, quæritur* and *queritur.*

4. Explain the use of the interrogative particles *utrum, an, ne,* and *num.*

5. Distinguish *dolus, fraus,* and *fallacia, segrego, sepono,* and *sejungo, extemplo, repente,* and *subito.*

6. What is *oratio obliqua?* How are the moods changed when a speech is transferred to that form?

III.

Translate :

Ne tamen ignores variorum jura dierum ;
  Non habet officii Lucifer omnis idem.
Ille Nefastus erit, per quem tria verba silentur ;
  Fastus erit, per quem lege licebit agi.
Nec toto perstare die sua jura putaris ;
  Qui jam Fastus erit, mane Nefastus erat.
Nam simul exta deo data sunt, licet omnia fari,
  Verbaque honoratus libera prætor habet.
Est quoque, quo populum jus est includere septis ;
  Est quoque, qui nono semper ab orbe redit.
Vindicat Ausonias Junonis cura Kalendas :
  Idibus alba Jovi grandior agna cadit.
Nonarum tutela deo caret. Omnibus istis,
  Ne fallare cave, proximus Ater erit.
Omen ab eventu est : illis nam Roma diebus
  Damna sub adverso tristia Marte tulit.
Hæc mihi dicta semel, totis hærentia fastis,
  Ne seriem rerum scindere cogar, erunt.
Ecce tibi faustum, Germanice, nuntiat annum,
  Inque meo primus carmine Janus adest.
Jane biceps, anni tacite labentis origo,
  Solus de superis qui tua terga vides,
Dexter ades ducibus, quorum secura labore
  Otia terra ferax, otia pontus agit.
Dexter ades patribusque tuis, populoque Quirini,
  Et resera nutu condita templa tuo.

<div align="right">OVID, <i>Fasti</i>, i., vv. 45-70.</div>

1. How are the following words governed—*officii, Jovi, deo* in v. 57, *istis, fastis, ducibus?*

2. *Tria verba.* What ?

3. What are *dies intercisi ?*

4. *Populum includere septis.* To what is the reference ?

5. v. 54. What is the Latin word for this ?

6. Express in Latin the 26th of September, the 13th of October, the 6th of July.

7. v. 60. To what is the reference ?

8. Write brief explanatory notes on *Lucifer, Ausonias, Germanice,* and *Quirini.*

9. What Latin authors wrote *Elegiacs ?*
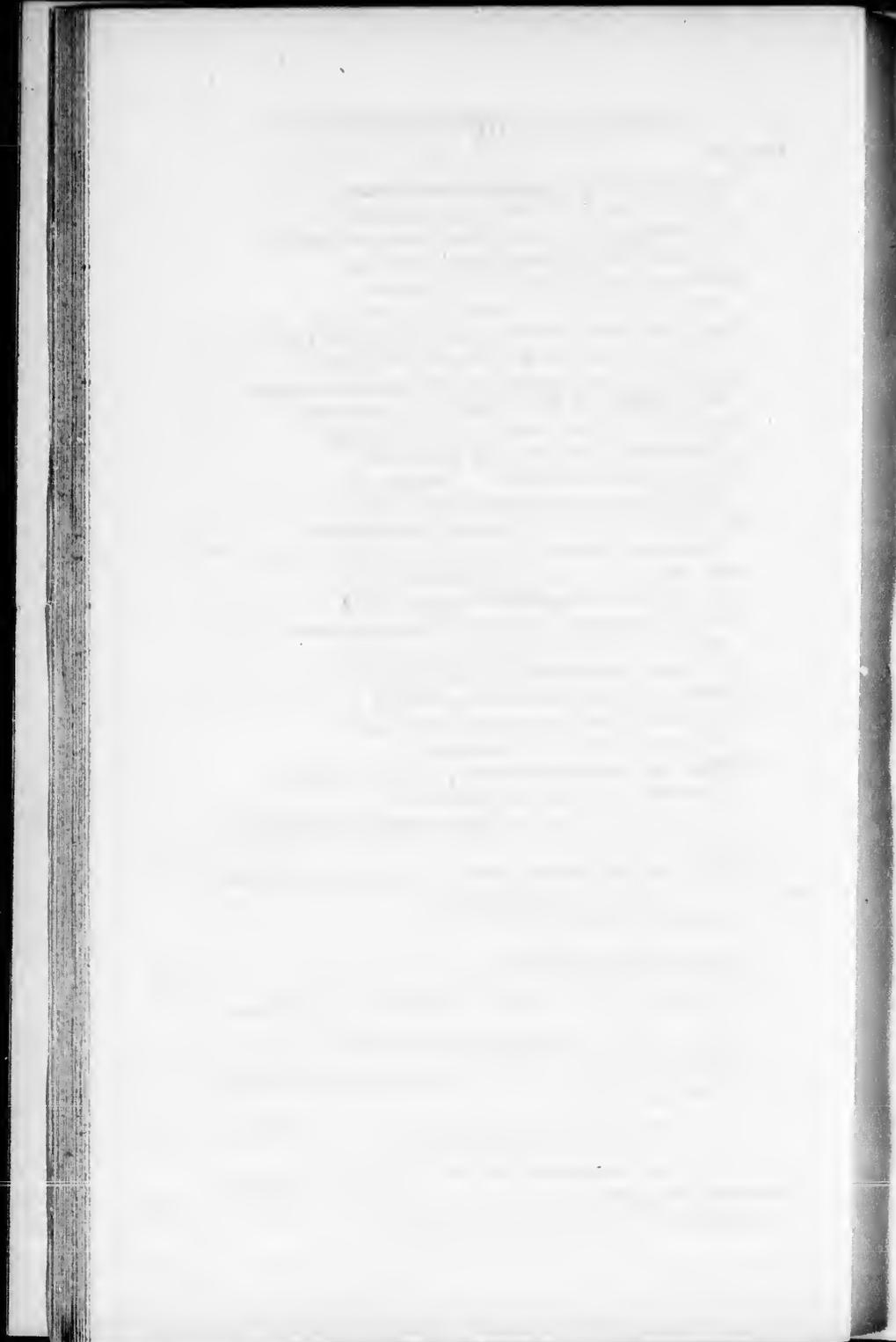
University of Toronto.

MATRICULATION.

GREEK.
HONORS AND SCOLARSHIPS.

Examiners: { JOHN McCAUL, LL.D.
THOMAS MOSS, M.A. }

I.

Translate :

Τὴν μὲν γὰρ σὺν νηὶ θοῇ ἑλίκωπες Ἀχαιοί
Ἐς Χρύσην πέμπουσιν, ἄγουσι δὲ δῶρα ἄνακτι·
Τὴν δὲ νέον κλισίηθεν ἔβαν κήρυκες ἄγοντες
Κούρην Βρισῆος, τήν μοι δόσαν υἷες Ἀχαιῶν.
Ἀλλὰ σύ, εἰ δύνασαί γε, περίσχεο παιδὸς ἑῆος·
Ἐλθοῦσ᾽ Οὔλυμπόνδε Δία λίσαι, εἴ ποτε δή τι
Ἢ ἔπει ὤνησας κραδίην Διὸς ἠὲ καὶ ἔργῳ.
Πολλάκι γάρ σέο πατρὸς ἐνὶ μεγάροισιν ἄκουσα
Εὐχομένης, ὅτ᾽ ἔφησθα κελαινεφέι Κρονίωνι
Οἴη ἐν ἀθανάτοισιν ἀεικέα λοιγὸν ἀμῦναι,
Ὁππότε μιν ξυνδῆσαι Ὀλύμπιοι ἤθελον ἄλλοι,
Ἥρη τ᾽ ἠδὲ Ποσειδάων καὶ Παλλὰς Ἀθήνη.
Ἀλλὰ σὺ τόν γ᾽ ἐλθοῦσα, θεά, ὑπελύσαο δεσμῶν,
Ὦχ᾽ ἑκατόγχειρον καλέσασ᾽ ἐς μακρὸν Ὄλυμπον,
Ὃν Βριάρεων καλέουσι θεοί, ἄνδρες δέ τε πάντες
Αἰγαίων· ὁ γὰρ αὖτε βίῃ οὗ πατρὸς ἀμείνων.

Iliad, I. vv. 389-414.

1. Ἄνακτι. Who is meant ?

2. σέο. Parse.

3. Distinguish between οἶος and οἰός.

4. Line 404.   Parse οὗ.

5. Write the common forms of : ἔβαν, ἄκουσα, κούρην, υἶες.

6. Give the derivations of : ἑλίκωπες, κελαινεφέϊ, ἀεικέα.

II.

Translate :

Τώ γ᾽ ὣς βουλεύσαντε διέτμαγεν· ἡ μὲν ἔπειτα
Εἰς ἅλα ἆλτο βαθεῖαν ἀπ᾽ αἰγλήεντος Ὀλύμπου,
Ζεὺς δὲ ἑὸν πρὸς δῶμα.   θεοὶ δ᾽ ἅμα πάντες ἀνέσταν
Ἐξ ἑδέων, σφοῦ πατρὸς ἐναντίον· οὐδέ τις ἔτλη
Μεῖναι ἐπερχόμενον, ἀλλ᾽ ἀντίοι ἔσταν ἅπαντες.
Ὣς ὁ μὲν ἔνθα καθέζετ᾽ ἐπὶ θρόνου. οὐδέ μιν Ἥρη
Ἠγνοίησεν ἰδοῦσ᾽ ὅτι οἱ συμφράσσατο βουλάς
Ἀργυρόπεζα Θέτις, θυγάτηρ ἁλίοιο γέροντος.
Αὐτίκα κερτομίοισι Δία Κρονίωνα προσηύδα.
" Τίς δ᾽ αὖ τοι, δολομῆτα, θεῶν συμφράσσατο βουλάς ;
Αἰεί τοι φίλον ἐστὶν ἐμεῦ ἀπονόσφιν ἐόντα,
Κρυπτάδια φρονέοντα δικαζέμεν· οὐδέ τί πώ μοι
Πρόφρων τέτληκας εἰπεῖν ἔπος ὅ ττι νοήσῃς."
    Τὴν δ᾽ ἠμείβετ᾽ ἔπειτα πατὴρ ἀνδρῶν τε θεῶν τε·
"Ἥρη, μὴ δὴ πάντας ἐμοὺς ἐπιέλπεο μύθους
Εἰδήσειν· χαλεποί τοι ἔσοντ᾽ ἀλόχῳ περ ἐούσῃ.

Iliad, I., vv. 531-546.

1. Parse διέτμαγεν, ἆλτο, ἠγνοίησεν.

2. Give common forms of : ἀνέσταν, συμφράσσατο, ἁλίοιο, δικαζέμεν, ἐπιέλπεο.

3. Derive : ἀργυρόπεζα, κερτόμιος, δολομήτης, πρόφρων, ἄλοχος.

4. Notice any idiomatic peculiarity in lines 536-538.

III.

Translate :

Ἔνθα δὲ πῦρ κείαντες ἐθύσαμεν· ἠδὲ καὶ αὐτοὶ
τυρῶν αἰνύμενοι φάγομεν· μένομέν τέ μιν ἔνδον
ἥμενοι, ἕως ἐπῆλθε νέμων· φέρε δ᾽ ὄβριμον ἄχθος
ὕλης ἀζαλέης, ἵνα οἱ ποτιδόρπιον εἴη.
ἔκτοσθεν δ᾽ ἄντροιο βαλὼν ὀρυμαγδὸν ἔθηκεν·
ἡμεῖς δὲ δείσαντες ἀπεσσύμεθ᾽ ἐς μυχὸν ἄντρου·

αὐτὰρ ὅγ᾽ εἰς εὐρὺ σπέος ἤλασε πίονα μῆλα,
πάντα μάλ᾽, ὅσσ᾽ ἤμελγε, τὰ δ᾽ ἄρσενα λεῖπε θύρηφιν,
ἀρνειούς τε τράγους τε, βαθείης ἔκτοθεν αὐλῆς.
αὐτὰρ ἔπειτ᾽ ἐπέθηκε θυρεὸν μέγαν ὑψόσ᾽ ἀείρας
ὄβριμον· οὐκ ἂν τόνγε δύω καὶ εἴκοσ᾽ ἄμαξαι
ἐσθλαί, τετράκυκλοι, ἀπ᾽ οὔδεος ὀχλίσσειαν.
τόσσην ἠλίβατον πέτρην ἐπέθηκε θύρῃσιν.
ἑζόμενος δ᾽ ἤμελγεν ὄϊς καὶ μηκάδας αἶγας,
πάντα κατὰ μοῖραν, καὶ ὑπ᾽ ἔμβρυον ἧκεν ἑκάστῃ.

Odyssey, IX., vv. 230-245.

1. Parse : κείαντες, ἀπεσσύμεθα, οὔδεος, ἧκεν.

2. Notice any metrical peculiarity in line 240 (αὐτὰρ ἔπειτ᾽ &c.)

3. ἠλίβατος, Mention different derivations.

4. Distinguish between θύ̄ω and θύ̆ω.

IV.

Translate :

"Ὡς ἐφάμην· ὁ δέ μ᾽ οἰμώξας ἠμείβετο μύθῳ·
ὢ πόποι, ἦ μάλα δή με παλαίφατα θέσφαθ᾽ ἱκάνει.
ἔσκε τις ἐνθάδε μάντις ἀνὴρ, ἠΰς τε μέγας τε,
Τήλεμος Εὐρυμίδης, ὅς μαντοσύνῃ ἐκέκαστο,
καὶ μαντευόμενος κατεγήρα Κυκλώπεσσιν·
ὅς μοι ἔφη τάδε πάντα τελευτήσεσθαι ὀπίσσω,
χειρῶν ἐξ Ὀδυσῆος ἁμαρτήσεσθαι ὀπωπῆς.
ἀλλ᾽ αἰεί τινα φῶτα μέγαν καὶ καλὸν ἐδέγμην
ἐνθάδ᾽ ἐλεύσεσθαι, μεγάλην ἐπιειμένον ἀλκήν·
νῦν δέ μ᾽ ἐὼν ὀλίγος τε καὶ οὐτιδανός καὶ ἄκικυς
ὀφθαλμοῦ ἀλάωσεν, ἐπεί μ᾽ ἐδαμάσσατο οἴνῳ.
ἀλλ᾽ ἄγε δεῦρ᾽, Ὀδυσεῦ, ἵνα τοι πὰρ ξείνια θείω,
πομπήν τ᾽ ὀτρύνω δόμεναι κλυτὸν Ἐννοσίγαιον.
τοῦ γὰρ ἐγὼ παῖς εἰμι, πατὴρ δ᾽ ἐμὸς εὔχεται εἶναι·
αὐτὸς δ᾽, αἴ κ᾽ ἐθέλῃσ᾽, ἰήσεται, οὐδέ τις ἄλλος,
οὔτε θεῶν μακάρων, οὔτε θνητῶν ἀνθρώπον.

Odyssey, IX., vv. 506-521.

1. ὢ πόποι. Explain the origin of the exclamation.

2. Parse : ἐδέγμην and ἐπιειμένον.

3. ἐννοσίγαιον. Who is meant ?

V.

1. To whom is the invention of the Greek alphabet ascribed? By whom are additions said to have been made? Whence were the forms of the breathings derived?

2. What do you understand by διορθώσεις? Distinguish between these, κατ' ἄνδρα, and these κατὰ πόλεις.

3. Mention writers whom you consider representatives of the Attic, Ionic, Doric, and Æolic dialects.

4. Mention three principal cases in which you may certainly know that the Digamma existed in a word.

5. When is a long vowel or diphthong at the end of a word *generally* made short in Homer? What exceptions?

6. Explain the terms: *paroxytone, proparoxytone,* and *properispomenon.*

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GREEK—LAW.

HONORS AND SCHOLARSHIPS.

Examiners: } REV. JOHN. McCAUL, LL.D.
THOMAS MOSS, M.A.

I.

Translate :

"Ἦ ῥά νύ μοι ξεῖνος πατρώϊός ἐσσι παλαιός·
Οἰνεὺς γάρ ποτε δῖος ἀμύμονα Βελλεροφόντην
Ξείνισ' ἐνὶ μεγάροισιν ἐείκοσιν ἤματ' ἐρύξας.
Οἱ δὲ καὶ ἀλλήλοισι πόρον ξεινήϊα καλά·
Οἰνεὺς μὲν ζωστῆρα δίδου φοίνικι φαεινόν,
Βελλεροφόντης δὲ χρύσεον δέπας ἀμφικύπελλον,
Καί μιν ἐγὼ κατέλειπον ἰὼν ἐν δώμασ' ἐμοῖσιν.
Τυδέα δ' οὐ μέμνημαι, ἐπεί μ' ἔτι τυτθὸν ἐόντα
Κάλλιφ', ὅτ' ἐν Θήβῃσιν ἀπώλετο λαὸς Ἀχαιῶν.
Τῷ νῦν σοὶ μὲν ἐγὼ ξεῖνος φίλος Ἄργεϊ μέσσῳ
Εἰμί, σὺ δ' ἐν Λυκίῃ, ὅτε κεν τῶν δῆμον ἵκωμαι.
Ἔγχεα δ' ἀλλήλων ἀλεώμεθα καὶ δι' ὁμίλου·
Πολλοὶ μὲν γὰρ ἐμοὶ Τρῶες κλειτοί τ' ἐπίκουροι
Κτείνειν ὅν κε θεός γε πόρῃ καὶ ποσσὶ κιχείω,
Πολλοὶ δ' αὖ σοὶ Ἀχαιοί, ἐναιρέμεν ὅν κε δύνηαι.
Τεύχεα δ' ἀλλήλοις ἐπαμείψομεν, ὄφρα καὶ οἵδε
Γνῶσιν ὅτι ξεῖνοι πατρώϊοι εὐχόμεθ' εἶναι."

Ὡς ἄρα φωνήσαντε, καθ᾽ ἵππων ἀΐξαντε,
Χεῖράς τ᾽ ἀλλήλων λαβέτην καὶ πιστώσαντο.
Ἔνθ᾽ αὖτε Γλαύκῳ Κρονίδης φρένας ἐξέλετο Ζεὺς,
Ὃς πρὸς Τυδείδην Διομήδεα τεῦχε᾽ ἄμειβεν
Χρύσεα χαλκείων, ἑκατόμβοι᾽ ἐννεαβοίων.
Ἕκτωρ δ᾽ ὡς Σκαιάς τε πύλας καὶ φηγὸν ἵκανεν,
Ἀμφ᾽ ἄρα μιν Τρώων ἄλοχοι θέον ἠδὲ θύγατρες
Εἰρόμεναι παῖδάς τε κασιγνήτους τε ἔτας τε
Καὶ πόσιας. Ὁ δ᾽ ἔπειτα θεοῖς εὔχεσθαι ἀνώγει
Πάσας ἑξείης· πολλῇσι δὲ κήδε᾽ ἐφῆπτο.

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Iliad, VI., vv. 215-241.

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1. Οἰνεύς. How connected with Diomede ?

2. δέπας ἀμφικύπελλον· Explain.

3. ὅτ᾽ ἐν Θήβῃσιν, &c. Explain the allusion.

4. What were the sentiments of the heroic age with respect to the duties of hospitality ?

5. φρένας ἐξέλετο Ζεύς. Mention any attempts of critics to explain the apparent meanness of this sentiment.

6. Parse and give the forms in Attic Greek of : ἐσσι, κάλλιφ᾽, κιχείω, ἐπαμειψομεν, ἐξέλετο, πολλῇσι.

7. Give the derivations of : ἀμύμων, ζωστῆρα, ὅμιλος, ἑκατόμβοια, κασίγνητος.

<div align="center">

II.

</div>

Translate :

" Ζεῦ ἄλλοι τε θεοὶ, δότε δὴ καὶ τόνδε γενέσθαι
Παῖδ᾽ ἐμὸν, ὡς καὶ ἐγώ περ, ἀριπρεπέα Τρώεσσιν,
Ὧδε βίην τ᾽ ἀγαθὸν, καὶ Ἰλίου ἶφι ἀνάσσειν.
Καὶ ποτέ τις εἴπῃσι, πατρός γ᾽ ὅδε πολλὸν ἀμείνων.᾽
Ἐκ πολέμου ἀνιόντα· φέροι δ᾽ ἔναρα βροτόεντα
Κτείνας δήϊον ἄνδρα, χαρείη δὲ φρένα μήτηρ"
" Ὣς εἰπὼν ἀλόχοιο φίλης ἐν χερσὶν ἔθηκεν
Παῖδ᾽ ἑόν· ἡ δ᾽ ἄρα μιν κηώδεϊ δέξατο κόλπῳ
Δακρυόεν γελάσασα. Πόσις δ᾽ ἐλέησε νοήσας,
Χειρί τέ μιν κατέρεξεν, ἔπος τ᾽ ἔφατ᾽, ἔκ τ᾽ ὀνόμαζεν.
" Δαιμονίη, μή μοί τι λίην ἀκαχίζεο θυμῷ·
Οὐ γάρ τίς μ᾽ ὑπὲρ αἶσαν ἀνὴρ Ἄϊδι προϊάψει·
Μοῖραν δ᾽ οὔ τινά φημι πεφυγμένον ἔμμεναι ἀνδρῶν,
Οὐ κακὸν, οὐδὲ μὲν ἐσθλὸν, ἐπὴν τὰ πρῶτα γένηται.
Ἀλλ᾽ εἰς οἶκον ἰοῦσα τὰ σ᾽ αὐτῆς ἔργα κόμιζε,
Ἱστόν τ᾽ ἠλακάτην τε, καὶ ἀμφιπόλοισι κέλευε

Ἔργον ἐποίχεσθαι· Πόλεμος δ' ἄνδρεσσι μελήσει
Πᾶσιν, ἐμοὶ δὲ μάλιστα, τοὶ Ἰλίῳ ἐγγεγάασιν."
"Ὣς ἄρα φωνήσας κόρυθ' εἵλετο φαίδιμος Ἕκτωρ
Ἵππουριν· ἄλοχος δὲ φίλη οἰκόνδε βεβήκει
Ἐντροπαλιζομένη, θαλερὸν κατὰ δάκρυ χέουσα.
Αἶψα δ' ἔπειθ' ἵκανε δόμους εὐναιετάοντας
Ἕκτορος ἀνδροφόνοιο, κιχήσατο δ' ἔνδοθι πολλὰς
Ἀμφιπόλους, τῇσιν δὲ γόον πάσῃσιν ἐνῶρσεν.
Αἱ μὲν ἔτι ζωὸν γόον Ἕκτορα ᾧ ἐνὶ οἴκῳ·
Οὐ γάρ μιν ἔτ' ἔφαντο ὑπότροπον ἐκ πολέμοιο
Ἵξεσθαι, προφυγόντα μένος καὶ χεῖρας Ἀχαιῶν.

<div align="right">*Iliad*, VI., vv. 476-502.</div>

1. Ἰλίου. Why in genitive?

2. δαιμονίη. Explain the signification of this epithet.

3. τὰ σ' αὐτῆς ἔργα. Translate into Latin.

4. Ἄϊδι. What was the Homeric idea of Hades?

5. Distinguish between ἀνήρ and ἄνθρωπος.

6. Line 479 (καὶ ποτέ τις, &c.) Explain the construction.

III.

1. To whom is the invention of the Greek alphabet ascribed? By whom are additions said to have been made? Whence were the forms of the breathings derived?

2. What do you understand by διορθώσεις? Distinguish between these, κατ' ἄνδρα, and those, κατὰ πόλεις.

3. Mention writers whom you consider representatives of the Attic, Ionic, Doric and Æolic dialects.

4. Mention three principal cases in which you may certainly know that the Digamma was present in a word.

5. When is a long vowel or diphthong at the end of a word *generally* made short in Homer? What exceptions?

6. Explain the terms: *paroxytone*, *proparoxytone*, and *properispomenon*.
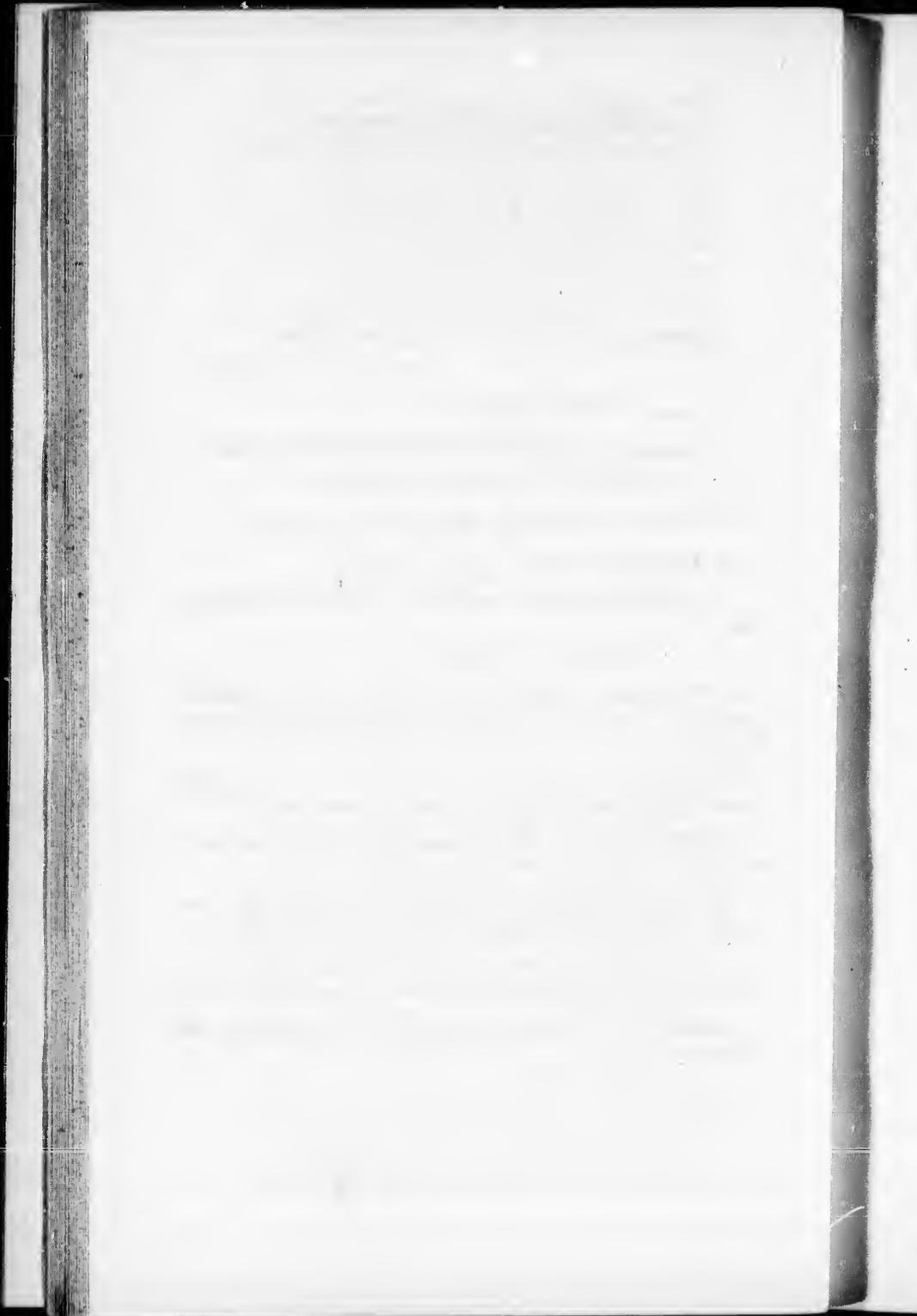
University of Toronto.

MATRICULATION.

TRANSLATION INTO LATIN.

Examiners: { Rev. John McCaul, LL.D.
Thomas Moss, M.A.

I.

When Xenophon was performing a customary sacrifice, he learned that the the the elder of his two sons, by name Gryllus, had fallen in battle at Mantinea; nor did he think that the commenced worship of the gods should be stopped on that account, but he was satisfied merely to lay down the crown. Having enquired in what manner he had fallen, when he heard that he had died fighting very bravely, he replaced the crown on his head, having called the deities, to whom he was sacrificing, to witness, that he felt greater pleasure from the valour of his son than pain from his death.

Xenophon cum sollemnis sacrificium perago, e duo filius magnus natus, nomen Gryllus, apud Mantinea in prælium cado cognosco; nec ideo instituo Deus cultus omitto puto, sed tantummodo corona depono contineo. Percontor quisnam modus occido, ut audio fortiter pugno intereo, corona caput repono, numen, qui sacrifico, testor magnus sui ex virtus filius voluptas quam ex mors amaritudo sentio.

II.

Masinissa, the neighbour of Carthage, who enjoyed the favour of the Romans, and seems even to have been instigated by them, neglected no opportunity of harass-

ing and annoying the reviving state. The Roman Cato, who was infatuated by a blind hatred of Carthage, partly perhaps because the Carthaginians had rejected his proffered mediation between them and Masinissa, and partly from a real, though unfounded fear of the growing power of Carthage, urged in every speech he made in the senate the necessity of crushing the African republic. Masinissa, who well knew the feelings of the party at Rome hostile to Carthage, and was sure not only of impunity, but of support and protection, increased his own dominion at the expense of Carthage, and by constant disputes and vexations drove the Carthaginians to the necessity of defending their rights by force of arms, because Rome, when appealed to, either delayed pronouncing sentence, or decided in favour of the aggressor. The Romans, gladly seizing the opportunity, charged the Carthaginians with having broken the peace. The people of Carthage implored their mercy; and to assure them that they had no hostile intentions, they not only sent three hundred of their noblest citizens as hostages to Rome, but delivered up all their ships and arms. This happened in B.C. 149; and when all this was done, the Romans further demanded that Carthage should be razed to the ground, and that the inhabitants should build a new town for themselves at a distance of many miles from the sea. The treacherous and insolent nature of this demand drove the people to despair and madness; they resolved to perish under the ruins of their own houses rather than yield to such insolence. A bold patriotic spirit seized all ranks and all ages, and the women cheerfully sacrificed all their finery upon the altar of their country. The whole city was at once changed into a military camp, temples were at once transformed into manufactories of arms, and nothing was spared that could serve to deliver the country from its impending doom.

III.

In the high-towering poplar thus swinging,
 My harp! hang suspended at ease;
Thy chords at soft intervals ringing,
 As swept by the hand of the breeze.

The blue vault its full beauty displaying,
 Not a cloud the pure æther o'ershades;
While in sighs his soft presence betraying,
 The green foliage young Zephyr pervades.

Thus I leave thee to murmur and quiver,
  As waked by the slow-rising wind;
While here by the side of the river
  I repose, on soft verdure reclined.

Ah! along the horizon dark scowling,
  What tempest-bred shadows appear!
Clouds! clouds rise incessantly rolling;
  Hark! the storm rushes loud on my ear.

Oh! my harp, my companion, my treasure,
  Let us rise, let us hasten away!
'Tis thus fly the phantoms of pleasure;
  Thus fade our bright hopes in decay.

GREEK—LAW.

Examiners : { Rev. John McCaul, LL.D.
Thomas Moss, M.A.

I.

Translate :

ἢ τί γὰρ οὐκ ἂν ποιήσειεν ἐκεῖνος ὁ τὴν οἰκίαν σπουδῇ
οἰκοδομούμενος, καὶ τοὺς ἐργάτας ἐπισπέρχων, εἰ μάθοι,
ὅτι ἡ μὲν ἕξει τέλος αὐτῷ. ὁ δὲ, ἄρτι ἐπιθεὶς τὸν ὄροφον,
ἀπίοι, τῷ κληρονόμῳ καταλιπὼν ἀπολαύειν αὐτῆς, αὐτὸς
μηδὲ δειπνήσας ἄθλιος ἐν αὐτῇ : ἐκεῖνος μὲν γὰρ ὁ χαίρων,
ὅτι ἄρρενα παῖδα ἔτεκεν αὐτῷ ἡ γυνὴ, καὶ φίλους διὰ
τοῦτο ἑστιῶν, καὶ τοὔνομα τοῦ πατρὸς τιθέμενος, εἰ ἠπίσ-
τατο, ὡς ἑπταέτης γενόμενος ὁ παῖς τεθνήξεται, ἆρα ἄν
σοι δοκῇ χαίρειν ἐπ' αὐτῷ γενομένῳ ; ἀλλὰ τὸ αἴτιον, ὅτι
τὸν μὲν εὐτυχοῦντα ἐπὶ τῷ παιδὶ ἐκεῖνον ὁρᾷ, τὸν τοῦ
ἀθλητοῦ πατέρα τοῦ Ὀλύμπια νενικηκότος· τὸν γείτονα
δὲ, τὸν ἐκκομίζοντα τὸ παιδίον, οὐκ ὁρᾷ, οὐδὲ οἶδεν ἀφ'
οἵας αὐτῷ κρόκης ἐκρέματο. τοὺς μὲν γὰρ περὶ τῶν ὅρων
διαφερομένους ὁρᾷς, ὅσοι εἰσὶ, καὶ τοὺς ξυναγείροντας τὰ
χρήματα, εἶτα, πρὶν ἀπολαῦσαι αὐτῶν, καλουμένους ὑφ'
ὧν εἶπον ἐπιόντων ἀγγέλων τε, καὶ ὑπηρετῶν. ΧΑΡ,
Ὁρῶ πάντα ταῦτα, καὶ πρὸς ἐμαυτὸν ἐγὼ ἐννοῶ, τί τὸ
ἡδὺ αὐτοῖς παρὰ τὸν βίον, ἢ τί ἐκεῖνό ἐστιν, οὗ στερού-
μενοι ἀγανακτοῦσιν. ΕΡΜ. Ἢν γοῦν τοὺς βασιλέας ἴδῃ
τις αὐτῶν, οἵπερ εὐδαιμονέστατοι εἶναι δοκοῦσιν, ἔξω τοῦ
ἀβεβαίου, καὶ ὡς φῂς ἀμφιβόλου τῆς τύχης, πλείω τῶν
ἡδέων τὰ ἀνιαρὰ εὑρήσει προσόντα αὐτοῖς, φόβους, καὶ

ταραχὰς, καὶ μίση, καὶ ἐπιβουλὰς, καὶ ὀργὰς καὶ κολα-
κείας· τούτοις γὰρ ἅπαντες ξύνεισιν. ἐῶ πένθη, καὶ
νόσους, καὶ πάθη, ἐξ ἰσοτιμίας δηλαδὴ ἄρχοντα αὐτῶν·
ὅπου δὲ τὰ τούτων πονηρὰ, λογίζεσθαι καιρὸς, οἷα τὰ τῶν
ἰδιωτῶν ἂν εἴη.

<div align="right">Lucian, Charon.</div>

1. ποιήσειεν. What part of the verb? How used in
Attic Greek?

2. αὐτῆς. (line 4). With what does this word agree?
Why in the genitive?

3. Ὀλύμπια. What case, and why? Mention the
names of the other great games of Greece.

4. ἐκκομίζοντα. What is the equivalent Latin word?

5. Parse the following words, and give the future and
second aorist active, and the perfects active and passive of
the verbs from which they come: μάθοι, ἕξει, χαίρων, ἔτεκεν,
τεθνήξεται, ὁρᾷ, εὑρήσει.

6. Parse: ἐπιθείς, ἠπίστατο, γενομένῳ, ἀθλητοῦ, ἐκρέ-
ματο, πλείω, πένθη, ἰδιωτῶν.

7. Conjugate the present of εἰμι through all the moods.

8. Decline εἷς, ἐγώ, οὗτος, σύ.

9. Give the genitives of ὄνομα, γυνή, ὑπηρετής, ἡδύς.

<div align="center">II.</div>

ΔΗΜ. Χαῖρε, ὦ Τίμων, τὸ μέγα ὄφελος τοῦ γένους, τὸ
ἔρεισμα τῶν Ἀθηναίων, τὸ πρόβλημα τῆς Ἑλλάδος· καὶ
μὴν πάλαι σε ὁ δῆμος ξυνειλεγμένος, καὶ αἱ βουλαὶ ἀμφό-
τεραι περιμένουσι· πρότερον δὲ ἄκουσον τὸ ψήφισμα, ὃ
ὑπὲρ σοῦ γέγραφα. ΕΠΕΙΔΗ Τίμων ὁ Ἐχεκρατίδου,
Κολυττεὺς, ἀνὴρ οὐ μόνον καλὸς κἀγαθὸς, ἀλλὰ καὶ
σοφὸς, ὡς οὐκ ἄλλος ἐν τῇ Ἑλλάδι, παρὰ πάντα χρόνον
διατελεῖ τὰ ἄριστα πράττων τῇ πόλει· νενίκηκε δὲ πὺξ,
καὶ πάλην, καὶ δρόμον, ἐν Ὀλυμπίᾳ μιᾶς ἡμέρας, καὶ
τελείῳ ἅρματι καὶ συνωρίδι πωλικῇ,—ΤΙΜ. Ἀλλ’ οὐδὲ
ἐθεώρησα ἐγὼ πώποτε εἰς Ὀλυμπίαν. ΔΗΜ. Τί οὖν;
θεωρήσεις ὕστερον· τὰ τοιαῦτα δὲ πολλὰ προσκεῖσθαι
ἄμεινον. καὶ ἠρίστευσε δὲ ὑπὲρ τῆς πόλεως πέρυσι πρὸς
Ἀχαρνέας, καὶ κατέκοψε Πελοποννησίων δύο μοίρας,—

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Μ. Τί οὖν ;
ροσκεῖσθαι
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μοίρας,—

ΤΙΜ. Πῶς ; διὰ γὰρ τὸ μὴ ἔχειν ὅπλα, οὐδὲ προεγρά-
φην ἐν τῷ καταλόγῳ· ΔΗΜ. Μέτρια τὰ περὶ σαυτοῦ
λέγεις, ἡμεῖς δὲ ἀχάριστοι ἂν εἴημεν ἀμνημονοῦντες. ἔτι
δὲ καὶ ψηφίσματα γράφων καὶ συμβουλεύων, καὶ στρατη-
γῶν, οὐ μικρὰ ὠφέλησε τὴν πόλιν· ἐπὶ τούτοις ἅπασι,
ΔΕΔΟΚΤΑΙ τῇ βουλῇ, καὶ τῷ δήμῳ, καὶ τῇ Ἡλιαίᾳ
κατὰ φυλὰς, καὶ τοῖς δήμοις ἰδίᾳ, καὶ κοινῇ πᾶσι,
χρυσοῦν ἀναστῆσαι τὸν Τίμωνα παρὰ τὴν ᾿Αθηνᾶν ἐν τῇ
ἀκροπόλει, κεραυνὸν ἐν τῇ δεξιᾷ ἔχοντα, καὶ ἀκτῖνας ἐπὶ
τῇ κεφαλῇ· καὶ στεφανῶσαι αὐτὸν χρυσοῖς στεφάνοις
ἑπτὰ, καὶ ἀνακηρυχθῆναι τοὺς στεφάνους σήμερον Διονυ-
σίοις τραγῳδοῖς καινοῖς· (ἀχθῆναι γὰρ δι᾽ αὐτὸν δεῖ
τήμερον τὰ Διονύσια). Εἶπε τὴν γνώμην Δημέας ὁ
ῥήτωρ, συγγενὴς αὐτοῦ ἀγχιστεὺς ὢν· καὶ γὰρ ῥήτωρ ἄριστος ὁ Τίμων, καὶ τὰ ἄλλα πάντα
ὁπόσα ἂν ἐθέλοι. Τουτὶ μὲν οὖν σοι τὸ ψήφισμα. ᾿Εγὼ
δέ σοι καὶ τὸν υἱὸν ἐβουλόμην ἀγαγεῖν παρὰ σὲ, ὃν ἐπὶ
τῷ σῷ ὀνόματι Τίμωνα ὠνόμακα.

<div style="text-align:right">Lucian, Timon.</div>

1. ξυνειλεγμένος. Parse.

2. αἱ βουλαὶ ἀμφότεραι. Explain, and give a brief
account of each.

3. μοίρας. Mention the subdivisions of the Lacedemo-
nian army.

4. Διονυσίοις. What were these? How many kinds
were there? How connected with the history of Greek
literature?

5. Explain the most common modes in which adverbs are
formed from adjectives in Greek.
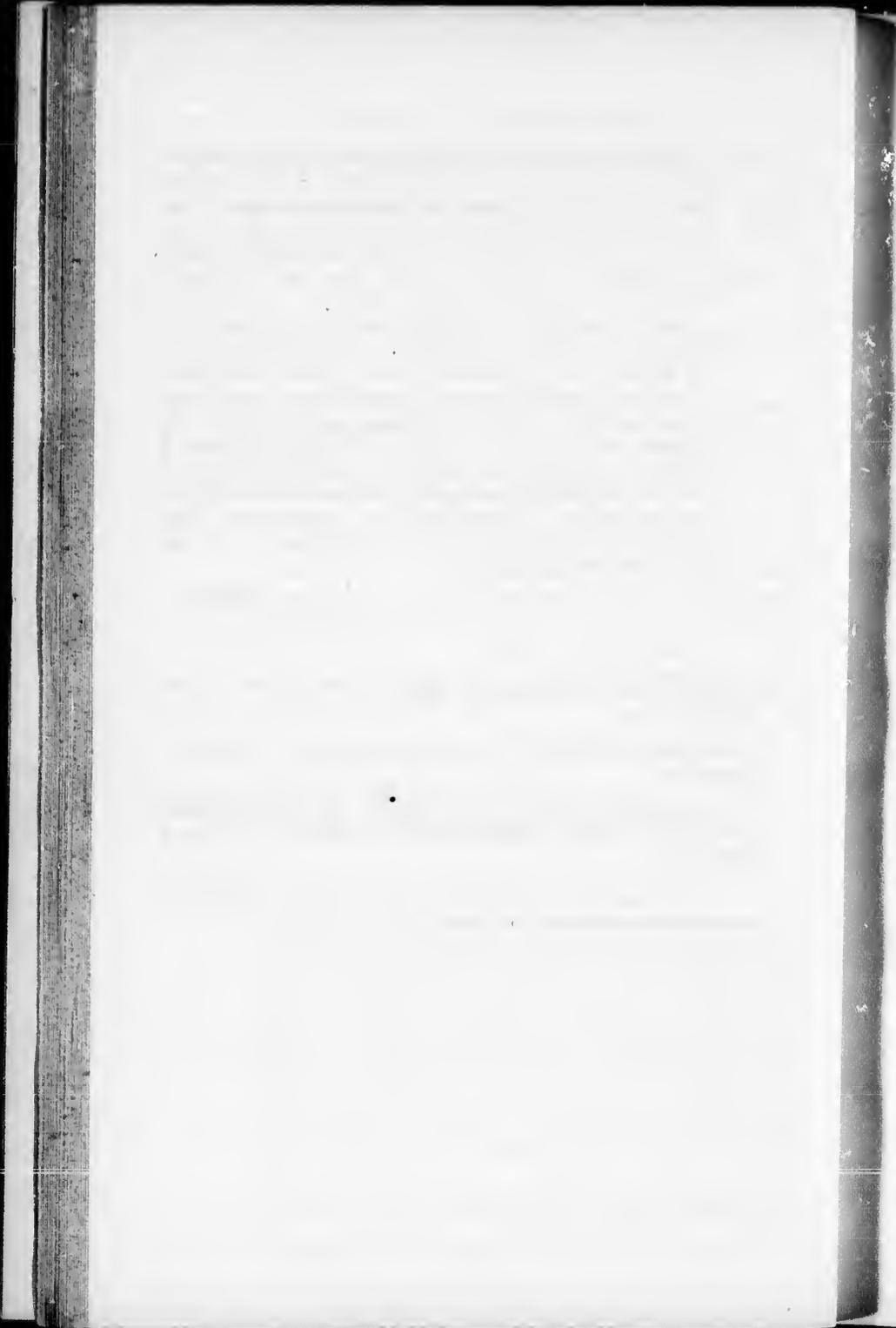
MATHEMATICS, I.—EUCLID, BB. I.—IV.

FOR HONORS.

Examiner: J. B. CHERRIMAN, M.A.

1. If two triangles have two sides of the one equal to two sides of the other, each to each, but the angle contained by the two sides of one of them greater than the angle contained by the two sides equal to them of the other, the base of that which has the greater angle is greater than the base of the other. (Prop. 24, B. I.)

If two triangles have one side and the angle opposite in each equal respectively, examine in what case the greater of two corresponding angles in each will have the greater side opposite to it.

2. The straight lines which join the extremities of two equal and parallel straight lines towards the same parts are themselves equal and parallel. (Prop. 33, B. I.)

Define a parallelogram, and state what additions to the definition are sufficient to constitute the figure a square, an oblong, and a rhombus respectively.

3. Parallelograms on the same base and between the same parallels are equal to one another. (Prop. 35, B. I.)

$A\,B\,C\,D$, $A\,b\,c\,d$, are two parallelograms such that B lies in $A\,b$, and D in $A\,d$; if point E be taken in $a\,b\,c$ so that cE, AD are equal, the parallelogram of which EB, Ed are adjacent sides will be equal to the difference of the two.

4. If a straight line be divided into any two parts, the squares on the whole line and one of the parts are equal to twice the rectangle contained by the whole and that part, together with the square on the other part. (Prop. 7, B. II.)

State the geometrical propositions which are equivalent to the algebraic identities,

$$(1)\ldots(x+y)^2=x^2+y^2+2xy,$$
$$(2)\ldots\ldots(x-y)^2=x^2+y^2-2xy,$$
$$(3)\ldots\ldots(x+y)^2+(x-y)^2=2x^2+2y^2.$$

5. To divide a given straight line into two parts, so that the rectangle contained by the whole and one of the parts may be equal to the square on the other part. (Prop. 11, B. II.)

The difference between the two parts is double that between the line joined in Euclid's construction and the given line.

6. Equal straight lines in a circle are equally distant from the centre; and those which are equally distant from the centre are equal to one another. (Prop. 14, B. III.)

If two equal straight lines in a circle cut each other, the segments of one are respectively equal to those of the other.

7. In equal circles, equal angles stand on equal arcs, whether they be at the centres or circumferences. (Prop. 26, B. III.)

If two equal circles cut each other, and through one point of section a line be drawn to cut the circles, the arcs between the other point of section of the circles and the points of section made by this line are equal, two and two.

8. From a given circle to cut off a segment containing an angle equal to a given rectilineal angle. (Prop. 34, B. III.)

Also, to cut off such a segment by a line which passes through a given point.

9. If from any point without a circle two straight lines be drawn, one of which cuts the circle, and the other touches it; the rectangle contained by the whole line which cuts the circle and the part of it without the circle, is equal to the square on the line which touches it. (Prop. 36, B. III.)

10. To inscribe a circle in a given triangle. (Prop. 4, B. IV.)

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If the points of contact be joined, and circles be inscribed in the three outer triangles thus formed, the centres will lie on the circumference of the original circle.

11. To describe an isosceles triangle, having each of the angles at the base double of the third angle.   (Prop. 9, B. IV.)

In what cases can an isosceles triangle be divided by a straight line into two triangles also isosceles?

12. To inscribe a regular hexagon in a given circle.   (Prop. 15, B. IV.)

This hexagon is half the circumscribed equilateral triangle.

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ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

MATHEMATICS, II.—ARITHMETIC AND ALGEBRA.

FOR HONORS.

Examiner : REV. W. JONES, B.A.

(Algebraical symbols must not be used in the first six questions.)

1. Multiply together **172814412** and **987654321**.
(Additional marks will be given if this is done in three lines.)

2. Whence does it appear that a vulgar fraction may always be reduced either to a terminated or a circulating decimal? Explain how to determine by inspection which kind of decimal any given fraction will produce. Reduce to decimals $\frac{33}{1055}, \frac{3}{17}$, and express as vulgar fractions in their lowest terms $3 \cdot 0561$, $15 \cdot 6013789$.

3. What is an aliquot part?
   Find by " practice " the value of
   (i) **1589** bushels at **$3.75** per bushel.
   (ii) 1 ton 6 cwt. 2 qrs. 6 lbs. 4 oz. at **$17.13** per ton.

4. Explain what is meant by interest and discount.

Find the time for which the discount on a certain sum of money will be equal to the interest on the same sum for a year, the rate of interest in both cases being 5 per cent.

5. What is meant by saying that gold is at a premium in the United States?

If the premium on gold be 105, find the discount on American treasury notes.

I purchase in Toronto American silver on which there is a discount of 4 per cent., and taking it to New York where gold and silver are both at a premium of 80, I there buy American paper money with the silver; gold falling to 150, I buy gold with my paper money, and upon my return to Toronto find that I have made just enough to pay my expenses, which were $120 in Canadian currency. What was the sum originally invested?

6. What is meant by "the Funds?" Explain why the English funds rose on the birth of the Prince Imperial of France.

A person holds stock in the English $3\frac{1}{2}$ per cents. which are at 98 to the amount of £1500 sterling. This he transfers to Canadian Government 6 per cents, which are at 105; find the alteration in his income in dollars, if £1 sterling is worth $4.87.

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7. Multiply x^2-7x+6 by x^2+3x-4, and divide the result by $x^2-2x+24$.

8. If m and n are positive integers, shew that $a^m \times a^n = a^{m+n}$.

Establish consistent meanings for a^0, a^{-p}, $a^{\frac{q}{r}}$.

9. Shew how to extract the square root of a binomial surd of the form $a + \sqrt{b}$.

Extract that of $17 + \sqrt{33}$.

10. Solve the following equations

(i) $\dfrac{x+8}{x-8} - \dfrac{x+5}{x-5} = 6.$

(ii) $\dfrac{x}{a} + \dfrac{b}{x} = 2.$

(iii) $\left. \begin{array}{c} x^2 - xy = 48 \\ xy - y^2 = 12 \end{array} \right\}.$

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11. A and B play a game together for a certain stake; A wins the game, and then his money is to B's as m to n; had B won the game, A's money would have been to B's as p to q; find the ratio of A's money to B's at first.

12. Show that if the squares of two numbers which lie between 20 and 30 end with the same digit, they will end with the same two digits.

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MATRICULATION.

MATHEMATICS, III.

FOR HONORS.

Examiners: { J. B. Cherriman, M. A.
Rev. W. Jones, B. A.

1. ⸱ complements of the parallelograms which are about the diameter of any parallelogram, are equal to one another.

Employ this proposition to describe upon a straight line a parallelogram equal to a given parallelogram.

2. The angles in the same segment of a circle are equal to one another.

Upon the same base, and on the same side of it, are described any number of triangles having their vertical angles equal; from the extremities of the base, lines are drawn perpendicular to the opposite sides; prove that the sets of lines which bisect the internal and external angles contained by these perpendiculars pass each through a fixed point.

3. To bisect a given circumference, that is, to divide it into two equal parts.

4. To describe an equilateral and equiangular quindecagon in a given circle.

Hence inscribe in a circle an isosceles triangle whose vertical angle is (i) thirteen times each of its base angles, (ii) one seventh of each of its base angles.

5. The perpendiculars from the angular points of a triangle $A B C$ upon the opposite sides meet in O; shew that the circle which passes through the middle points of OA, OB, OC passes also through the feet of the perpendiculars, and through the middle points of the sides.

vi. When gold is at 250 in Wall Street, what further rise will make a reduction of one cent. in the dollar?

vii. The value of the old Spanish dollar (which was the unit of exchange between America and England) was 4s. 6d. sterling, but gold became the standard of the U. S. currency by the acts of 1834–7, which made the gold eagle weigh 258 grains, being nine-tenths fine. The English coinage is of metal 22 carats fine, 40lbs. being coined into 1869 sovereigns. With these data explain why the bank par of exchange between New York and London is said to be $109\frac{1}{2}$.

viii. Can any meaning be assigned to the algebraic symbol a^n when n is an incommensurable quantity?

By what reasoning is the truth of propositions, which have been proved for commensurables, inferred for incommensurables also?

ix. Prove that $(a-b)(b-c)(c-a)$ is a measure of each of the quantities
$$(a^2-b^2)^5+(b^2-c^2)^5+(c^2-a^2)^5,$$
$$(a-b)^5 + (b-c)^5 + (c-a)^5.$$
Have these any other common measure?

x. Prove that the greatest common measure of any set of quantities is the least common multiple of all the common measures; and the least common multiple is the greatest common measure of all the common multiples.

If the greatest common measure of a and b be c, the least common multiple of
$$(a+b)(a^3-b^3) \text{ and } (a-b)(a^3+b^3)$$
is $\dfrac{a^6-b^6}{c^2}$.

xi. When are three quantities said to be in arithmetic, geometric, or harmonic progression?

If (a,b,c) are in arithmetic progression, and so also (x,y,z),

while (ax, by, cz) are in geometric, and $\left(\dfrac{x}{a}, \dfrac{y}{b}, \dfrac{z}{c}\right)$ in harmonic, then will

$$1-\frac{b^3}{a^2c}, \qquad \frac{a-c}{2b}, \qquad \frac{b^3}{ac^2}-1,$$

be in harmonic.

xii. In an arithmetic progression, having given the sum s, the last term l, and the common difference d, determine the limitations to which s, l, d are subject, in order that a real series may exist.

If only one such series exist, shew that l must be of the form $(p-\tfrac{1}{2})d$, where p is a positive integer, and $\dfrac{2s}{d}$ must be the square of an integer.

xiii. From the series of odd numbers in order $1, 3, 5, 7, \ldots\ldots$, groups are taken, commencing successively with the numbers next greater than the products $1.2.3,\ 2.3.4,\ 3.4.5,\ldots\ldots$, and embracing $2,3,4,\ldots\ldots$ numbers respectively; prove that the sums of the numbers in these respective groups produce the fourth powers of the natural numbers in succession.

xiv. Explain what is meant by the limit of the sum of a series of quantities in a decreasing geometric progression, and obtain an expression for the value of this limit.

Also obtain an expression for the limit of the sum of the series found by taking the products of every two terms of the above series.

xv. Solve the equations

$$\left(\frac{x}{y}\right)^{x+y} =\frac{y^4}{x}, \quad (xy)^{x+y} =y^4x.$$

xvi. If

$$\frac{a^2+b^2-c^2-d^2}{a-b+c-d} = \frac{a^2-b^2-c^2+d^2}{a+b+c+d},$$

then will

$$\frac{ac-bd}{a-b+c-d} = \frac{ad-bc}{a-b-c+d}.$$

xvii. There are $(n+1)$ vessels which contain each the same quantity (a) of fluid. The contents of the first are distributed equally among all the others; then those of the second are distributed in the same way; then those of the third, and so on. Prove that when the last vessel has been thus treated, the quantity of fluid contained then in the rth is

$$a\left(1+\frac{1}{n}\right)^r\left\{\left(1+\frac{1}{n}\right)^{n-r+1}- 1\right\}.$$
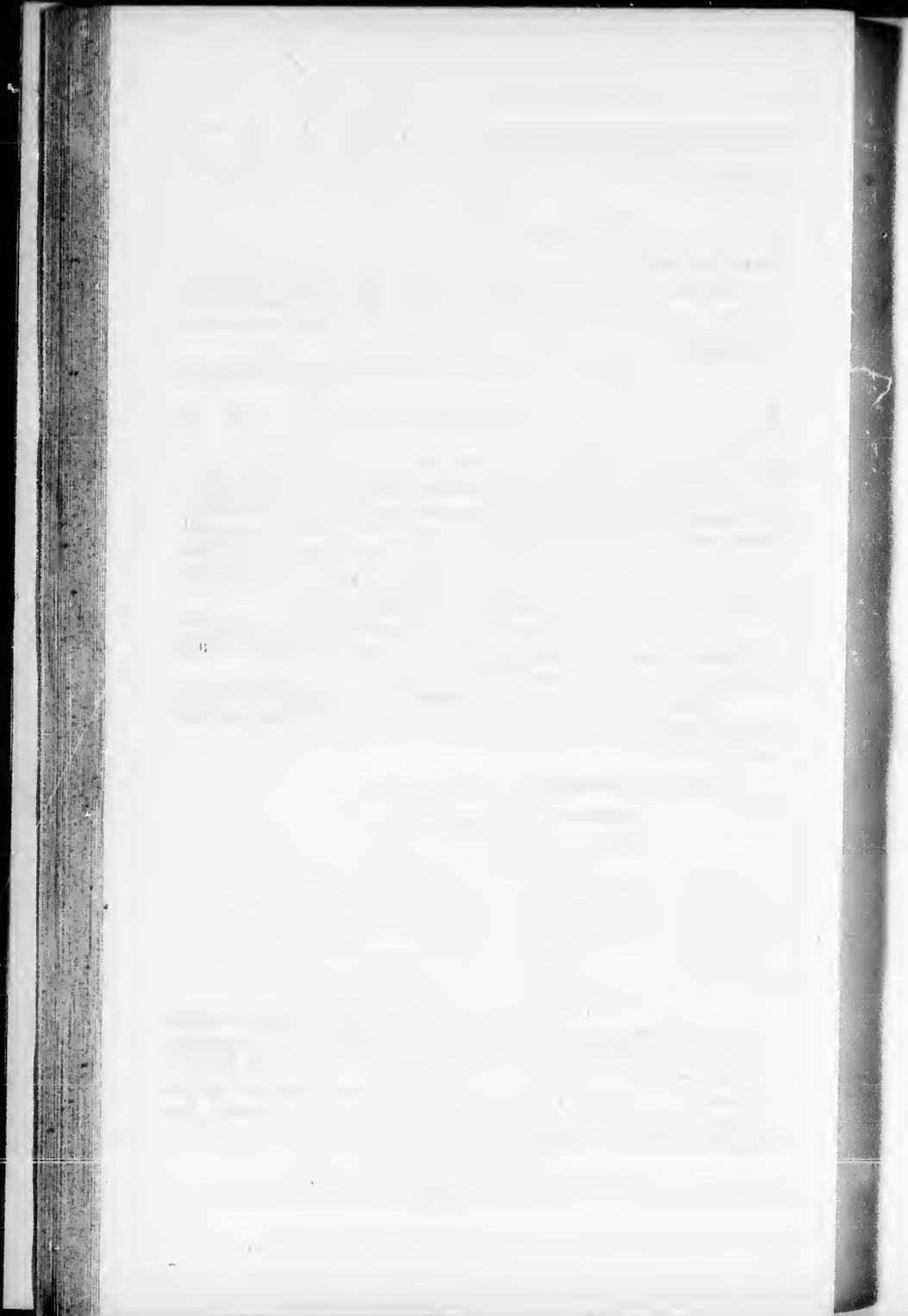
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MATRICULATION.

ENGLISH—ARTS AND MEDICINE.

Examiners: { DANIEL WILSON, LL.D.
J. A. BOYD, M.A.

1. Give the derivation and meaning of the following terms: orthography, orthoepy, syllable, syntax, pleonasm and periphrasis. Give the derivation of "etymology," and the two significations of the term.

2. Name the marks of punctuation commonly in use, stating the derivation of each name, and give examples of their correct employment.

3. What do you understand by *strong* and *weak* tenses? What is the origin of the distinction and the reason of the epithets?

4. What are the uses of inflexions, and in how far do inflexions obtain in English grammar at present? What is the tendency of the language in this respect? State some of the chief points of distinction between Latin and English grammar.

5. Ben Jonson speaks of " the monstrous syntax of the pronoun *his* joining with a noun betokening a possessor, as, the *prince his house*." What theory gave rise to this practice? Expose the falsity of the theory in question.

6. What is the correct plural of the words *money, attorney, die, with, while*. Mention some English nouns without a singular, and some without a plural.

7. The following phrases are in use in conversation and in literature : *many men, many a man, a many men.* If these expressions are all correct, reconcile them in parsing. If not, point out which are proper, with reasons.

8. What etymological peculiarities do you note in the words *children, chickens, songstress, whilom, twain ?*

9. Dr. Witherspoon, in his Lectures on Divinity, has this passage : "What I chiefly mean is to repeat, and endeavour to bring you to enter into the great and leading view which you ought to have in your studies, and which I desire to have still before my eyes in teaching. This may be expressed in one sentence : to unite together piety and literature—to shew their relation to, and their influence one upon another, and to guard against any thing that may tend to separate them, and set them in opposition one to another."

Point out the syntactical faults of the last period, and re-write it correctly.

ADDITIONAL FOR STUDENTS-AT-LAW.

10. What do you understand by the term " orthographical expedient ?"   Give examples thereof.

11. Give examples of what Latham styles the *erroneousness* and *redundancy* of the English alphabet.

12. Explain fully the force of the word *the* in these phrases, " *All the more,*" " *All the better.*"   How originated this peculiarity of employment ?

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ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

ENGLISH.
HONORS.

Examiners: { DANIEL WILSON, LL.D.
{ J. A. BOYD, M.A.

1. Punctuate, and state reasons for the distinction in the use of *semicolon* and *colon* :—

"God will render to every man according to his deeds to them that are contentious and do not obey the truth but obey unrighteousness indignation and wrath tribulation and anguish upon every soul of man that doeth evil of the Jew first and also of the Gentile."

2. Re-construct or amend the following, with reasons :—

a. "Buonaparte, as well as Charlemagne and the Fifth Charles, were re-modellers of Europe." *Alison.*

b. "He was under no small confusion to find that what he thought was a new conceit, and had appropriated to his own use, had appeared in print before." *Addison.*

c. Human is what every man is, humane is what every man ought to be; but he is only rarely found to combine the two.

3. Write all tense-forms of the verb *to strike*, and state how many of them are, etymologically, true tenses; with reasons for the answer.

4. "The logical difference between a *noun* and a *verb* is less marked than the grammatical one." Explain this, and give illustrations.

5. *C'est moi* is correct French. Are, *it is me ; it is him* correct English? Give reasons.

6. What is indicated in relation to grammatical structure by such popular errors as : *I done it ; I gone ; he telled me ;* &c. ?

7. Marsh says : "To parse an English sentence, you must first understand it ; to understand a Latin one, you must first parse it." Explain fully the truth stated here.

8. Point out, and explain the changes in grammatical and etymological usage, indicated in the following sentences :

  a. "How is it that thou askest drink of me, which am a woman of Samaria ?"

  b. "Prevent us O Lord, in all our doings, with thy most gracious favour."

  c. "This is Elias which was for to come."

  d. "Make the tree good and his fruit good ; for the tree is known by his fruit."

9. *Will* must never be used in questions with nominative cases of the first person. Explain this, and give illustrations.

10. In the Latin, *hic* (this) refers to the last named antecedent, and *ille* (that) to the first. e. g.

  Quocunque aspicies nihil est nisi pontus et aer,
  Humidus *hic* tumidus, fluctibus *ille* minax." *Ovid.*

What is the corresponding rule in English? Give an example.

11. Define the difference in the following :—

a. He is a better soldier than scholar.

b. He is a better soldier than *a* scholar.

COMPOSITION.—The history of the English race can be traced in its language.
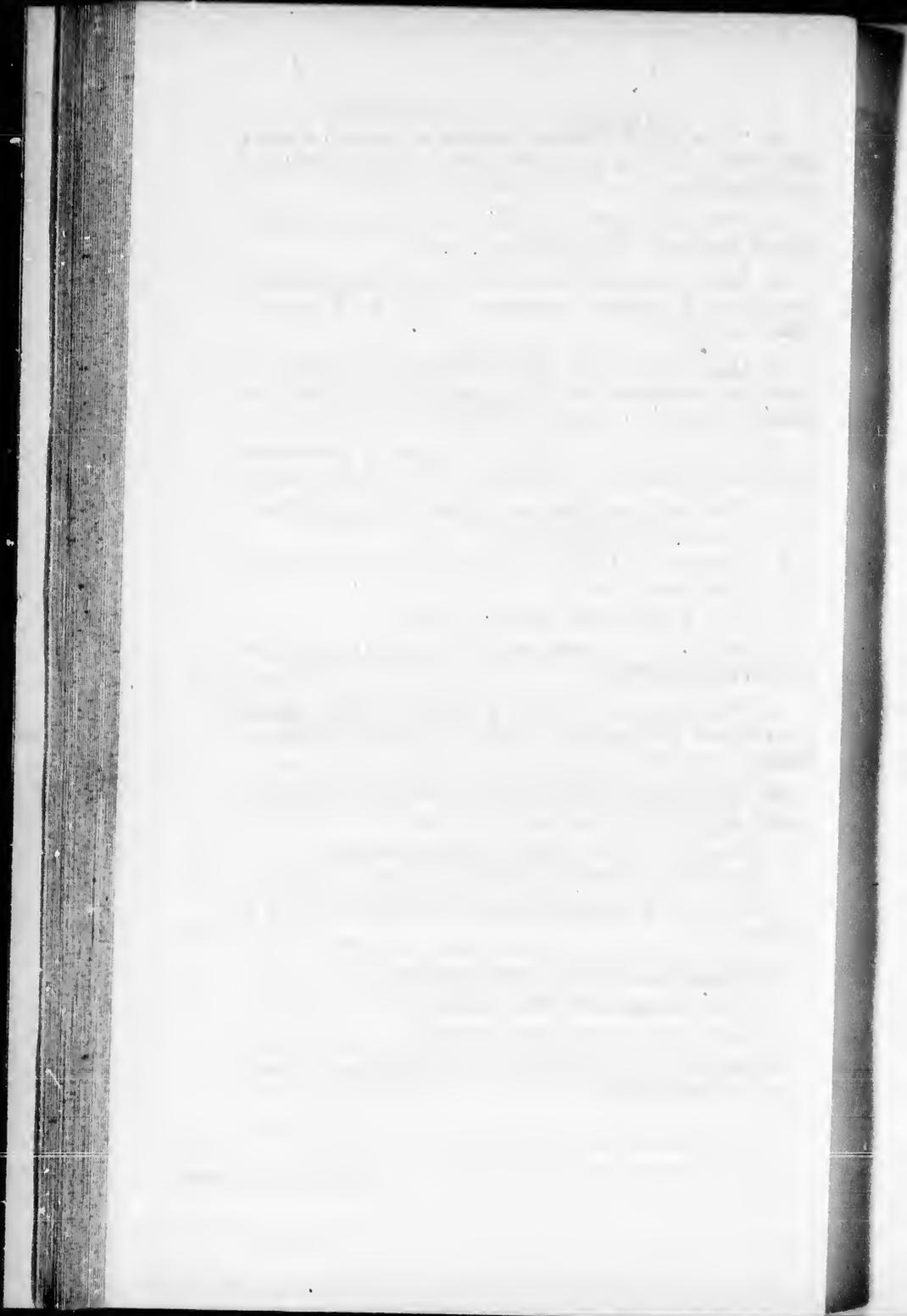
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MATRICULATION.

HISTORY AND GEOGRAPHY.

Examiners: } DANIEL WILSON, LL.D.
{ J. A. BOYD, M.A.

ANCIENT HISTORY.

1. Under what circumstances did the Tarentines apply for aid to Pyrrhus; and with what results?

2. Explain the difference between *Municipia, Coloniæ,* and *Præfectura.*

3. State the circumstances under which the naval victories of *Salamis, Mylæ,* and *Actium,* were gained.

4. What course was pursued by Octavianus after the assassination of Julius Cæsar?

5. Sketch the Roman conquests in Britain by Agricola.

BRITISH HISTORY.

1. Sketch the history of the Long Parliament.

2. What order of succession was disturbed by Queen Anne's accession to the throne; and with what results?

3. Name the chief victories of Marlborough; and define the terms of the treaty of Utrecht.

4. State the claims, (1) by constitutional right; (2) by hereditary right; by which the Hanoverian dynasty succeeded to the English throne.

GEOGRAPHY.

1. Define the courses of the following rivers, and name the chief towns on each :—The Tyne; Rhone; Elbe; Tagus; Neva; Volga; Indus; Rio Grande.

2. State the boundaries of Wallachia; Portugal; Belgium; Brazil; and the chief cities of each.

3. Name the chief colonies of the British Empire; state the geographical position of each; and define the meaning of Crown Colonies.

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ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

HISTORY—ARTS.
HONORS.

Examiners: { Daniel Wilson, LL.D.
{ J. A. Boyd, M.A.

1. Shew by genealogical tables the several titles to the throne of the Houses of Tudor and Stuart respectively.

2. Hamilton says that "Henry VII. endeavoured to strengthen his family interest by matrimonial alliances with the continent." Specify what marriages were thus contracted, and discuss in how far their ultimate results answered the king's expectations.

3. When did England first exercise an important influence in European affairs? Under what circumstances did this influence arise, and how was it manifested?

4. What difficulties as to the succession to the throne arose in Edward VI.'s reign? How were these difficulties resolved?

5. Sketch the circumstances connected with the disgrace and death of Sir Walter Raleigh.

6. Give some account of the character and policy of the Earl of Strafford.

7. How many Convention Parliaments assembled during the Tudor and Stuart period, and under what circumstances were they convoked ?

8. Name and give the position of all the insular colonies and dependencies of Great Britain.   Specify the dates when each was acquired or established.

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ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

HISTORY—LAW.

HONORS.

Examiners: } Daniel Wilson, LL.D.
J. A. Boyd, M.A.

1. Justify the use of the appellatives, "Age of Augustus" and "Age of Pericles; contrast the characteristics of these two periods.

2. Define the limits of the Periclean era, and mention the representative men who flourished therein in architecture, sculpture and painting.

3. Name the most eminent prose-writers of these two periods and their productions; point out the distinguishing excellences of each writer.

4. Sketch the foreign and domestic policy of Pericles.

5. Trace the successive steps whereby Augustus ascended to the height of power and managed to centralize all authority in himself. Show by a genealogical table his relationship to Julius Cæsar.

6. Describe fully the developements of the drama in the hands of Æschylus.

ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

FRENCH.—ARTS AND MEDICINE.

HONORS AND SCHOLARSHIPS.

Examiners : { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.

Translate :

On s'était adressé à cette régence de Vienne, parce qu'alors l'empereur d'Allemagne, Charles, successeur de Joseph Ier, était en Espagne, où il disputait la couronne à Philippe V. Pendant que l'envoyé allemand exécutait à Vienne cette commission, le grand vizir envoya trois bachas au roi de Suède pour lui signifier qu'il fallait quitter les terres de l'empire turc.

Le roi, qui savait l'ordre dont ils étaient chargés, leur fit d'abord dire que s'ils osaient lui rien proposer contre son honneur et lui manquer de respect, il les ferait pendre tous trois sur l'heure. Le bacha de Salonique, qui portait la parole, déguisa la dureté de sa commission sous les termes les plus respectueux. Charles finit l'audience sans daigner seulement répondre : son chancelier Mullern, qui resta avec ces trois bachas, expliqua en peu de mots le refus de son maître, qu'ils avaient assez compris par son silence.

Le grand vizir ne se rebuta pas ; il ordonna à Ismaël-Bacha, nouveau séraskier de Bender, de menacer le roi de l'indignation du sultan s'il ne se déterminait pas sans délai. Ce séraskier était d'un tempérament doux et d'un esprit conciliant, qui lui avait attiré la bienveillance de Charles et l'amitié de tous les Suédois. Le roi entra en conférence avec lui, mais ce fut pour lui dire qu'il ne partirait que quand Achmet lui aurait accordé deux choses, la punition de son grand vizir, et cent mille hommes pour retourner en Pologne.

VOLTAIRE, *Charles* XII., c. 6.

1. *Où il disputait.* Explain the use and meaning of the imperfect tense in this passage.

2. *Leur fit d'abord dire.* Explain the meaning of this phrase.

3. *Lui rien proposer.* What is the signification of *rien* here ?

4. *Qui lui avait attiré.* What is the antecedent of *qui ?*

5. *Lui aurait accordé.* When does the active past participle agree with the object of the verb ?

6. When does *mille* take the mark of the plural ?

GRAMMAR.

1. What is the general rule for the formation of the plural of substantives ? Give the plurals of *chapeau, hibou, clou, sou, gouvernail.*

2. How many degrees of comparison of adjectives ? How are they formed ?

3. What is the difference between the superlative relative and the superlative absolute ?

4. When do *vingt* and *cent* take an *s* in the plural, and when not ?

5. Where do the personal pronouns generally stand in relation to the verb ? Mention the exceptions to the general rule.

6. Explain the use of *celui-ci* and *celui-là* in referring to two or more objects.

7. Translate into French, "*The man of whom you speak.*".

8. Explain the use of the word *personne* as a pronoun and as a noun.

9. Go through the imperfect subjunctive of *vendre* and *parler*.

10. What is a neuter verb? Give an example.

11. Translate into French, "*This book is mine.*"

ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

FRENCH—LAW.

HONORS AND SCHOLARSHIPS.

Examiners: } James Forneri, LL.D.
Robert Sullivan, M.A.

I.

Translate :

Les patriciens voulant empechêr le retour des rois cherchèrent à augmentur le mouvement, qui etait dans l'esprit du peuple ; mais ils firent plus qu'ils ne voulurent ; à force de lui donner de la haine pour les rois ; ils lui donnèrent un desìr immodéré de la liberté. Comme l'autorité royale avait passé toute entiere entre les mains des consuls, le peuple sentit que cette liberté dont on voulait lui donner tant d'amour, il ne l'avait pas : il chercha donc à abaisser le consulat, à avoir des magistrats plébéiéns ; et à partager avec les nobles les magistratures curules. Les patriciens furent forcés de lui accorder tout ce qu'il demanda ; car dans une ville où la pauvretè était la vertu publique, où les richesses, cette voie sourde pour acquérir la puissance, étaient meprisées, la naissance et les dignités ne pouvaient pas donner de grands avantages. La puissance devait donc revenir au plus grand nombre, et l'aristocratie se changer peu à peu en un état populaire.

Grandeur des Romains, c. viii.

1. Parse *chercherent, firent, voulurent.*

2. *De la haine.* Why is the article used ?

3. *Lui donnèrent.* What part of speech is *lui?*

4. *Dont on voulait.* What part of speech is *dont*, and by what other French words could you express the same meaning?

5. *Où les richesses.* What part of speech is *où*, and how would you otherwise express the same meaning?

6. *De grands avantages.* Why is the article not used here?

7. *Se changer.* Why is *changer* in the infinitive mood?

GRAMMAR.

1. What is the general rule for the formation of the plural of substantives? Give the plurals of *chapeau, hibou, clou, sou, gouvernail.*

2. How many degrees of comparison of adjectives? How are they formed?

3. What is the difference between the superlative relative and the superlative absolute?

4. When do *vingt* and *cent* take an *s* in the plural, and when not?

5. Where do the personal pronouns generally stand in relation to the verb? Mention the exceptions to the general rule.

6. Explain the use of *celui-ci* and *celui-là* in referring to two or more objects.

7. Translate into French, " *The man of whom you speak.*"

8. Explain the use of the word *personne* as a pronoun and as a noun.

9. Go through the imperfect subjunctive of *vendre* and *parler.*

10. What is a neuter verb? Give an example.

11. Translate into French, " *This book is mine.*"

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ANNUAL EXAMINATIONS: 1864.

MATRICULATION.

NATURAL HISTORY—MEDICINE.

Examiners: { REV. PROFESSOR HINCKS, F.L.S.
{ THOS. J. COTTLE, ESQ.

BOTANY.

1. Explain the term Monocotyledonous. In what other particulars respecting the structure of the stem, the venation of the leaves, and the prevailing number of parts in the floral circles do Monocotyledonous plants differ from others?

2. Stomata, their structure and probable use, where occurring, and in what number.

3. The difference between definite and indefinite annual growth, and between deliquescent and excurrent trunks.

4. The exterior two circles of parts forming the flower, with the terms applied according to their degrees of combination or separation, regularity and irregularity, comparative development and tendencies in respect to figure.

ADDITIONAL QUESTIONS ADDRESSED TO CANDIDATES FOR HONORS.

5. Chemical composition of plants, their food and the sources from which it is obtained.

6. The ovule, its structure and parts, varieties in its position in respect to the carpel. The four kinds of ovule named and defined.

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7. Modifications of the receptacle or torus, and terms expressing its relation to the circles of the flower.

COMPARATIVE PHYSIOLOGY.

8. What are the distinctions between organised and unorganised bodies?

9. Name the functions of animal and vegetative life.

10. Describe the process of aeration or respiration, and the principal varieties in the methods by which it is effected.

ADDITIONAL QUESTIONS ADDRESSED TO CANDIDATES FOR HONORS.

11. What are the distinct parts which make up the brain in the higher animals?

12. Describe the development of medusæ, and the manner in which numerous animals are produced from a single egg.

13. Describe gemmiparous and fissiparous re-production.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

GREEK.

Examiners: { REV. JOHN McCAUL, LL.D.
THOMAS MOSS, M.A.

I.

Translate :

Ἦν γοῦν τοὺς βασιλέας ἤδη τις αὐτῶν, οἵπερ εὐδαιμο-
νεστατοι εἶναι δοκοῦσιν, ἔξω τοῦ ἀβεβαίου καὶ ὡς φὴς
ἀμφιβόλου τῆς τύχης, πλείω τῶν ἡδέων τὰ ἀνιαρὰ
εὑρήσει προσόντα αὐτοῖς, φόβους καὶ ταραχὰς καὶ μίση
καὶ ἐπιβουλὰς καὶ ὀργὰς καὶ κολακείας· τούτοις γὰρ
ἅπαντες ξύνεισιν. ἐῶ πένθη καὶ νόσους καὶ πάθη ἐξ
ἰσοτιμίας δηλαδὴ ἄρχοντα αὐτῶν· ὅπου δὲ τὰ τούτων
πονηρά, λογίζεσθαι καιρὸς οἷα τὰ τῶν ἰδιωτῶν ἂν εἴη.
ἐθέλω δ᾽ οὖν σοι, ὦ Ἑρμῆ, εἰπεῖν, ᾧτινι ἐοικέναι μοι
ἔδοξαν οἱ ἄνθρωποι καὶ ὁ βίος ἅπας αὐτῶν. ἤδη ποτὲ
πομφόλυγας ἐν ὕδατι ἐθεάσω ὑπὸ κρουνῷ τινι καταρράτ-
τοντι ἀνισταμένας; τὰς φυσαλίδας λέγω, ἀφ᾽ ὧν ξυνα-
γείρεται ὁ ἀφρός· ἐκείνων τοίνυν τινὲς μὲν μικραί εἰσι
καὶ αὐτίκα ἐκραγεῖσαι ἀπέσβησαν, αἱ δ᾽ ἐπὶ πλέον
διαρκοῦσι καὶ προσχωρουσῶν αὐταῖς τῶν ἄλλων αὗται
ὑπερφυσώμεναι ἐς μέγιστον ὄγκον αἴρονται, εἶτα μέντοι
κἀκεῖναι πάντως ἐξερράγησάν ποτε· οὐ γὰρ οἷόν τε ἄλλως
γενέσθαι. τοῦτό ἐστιν ὁ ἀνθρώπου βίος.

LUCIAN, *Charon.*

1. Parse εὑρήσει, ἐοικέναι, ἐθεάσω, ἐκραγεῖσαι, ἀπέσβησαν,
and ἐξερράγησαν.

2. τοῦ ἀβεβαίου. What is the construction ?

3. τούτοις. Why in dative ?

4. What are the laws regulating the position of the circumflex ?

5. οἷόν τε. Explain this form.

II.

Translate :

Ταῦτα ἔτι λεγούσης αὐτῆς οὐ περιμείνας ἐγὼ τὸ τέλος
τῶν λόγων ἀναστὰς ἀπεφηνάμην, καὶ τὴν ἄμορφον ἐκείνην
καὶ ἐργατικὴν ἀπολιπὼν μετέβαινον πρὸς τὴν Παιδείαν
μάλα γεγηθώς, καὶ μάλιστα ἐπεί μοι εἰς νοῦν ἡ σκυτάλη
καὶ ὅτι πληγὰς οὐκ ὀλίγας εὐθὺς ἀρχομένῳ μοι χθὲς
ἐνετρίψατο. ἡ δὲ ἀπολειφθεῖσα τὸ μὲν πρῶτον ἠγανάκτει
καὶ τὼ χεῖρε συνεκρότει καὶ τοὺς ὀδόντας συνέπριε· τέλος
δέ, ὥσπερ τὴν Νιόβην ἀκούομεν, ἐπεπήγει καὶ εἰς λίθον
μετεβέβλητο. εἰ δὲ παράδοξα ἔπαθε, μὴ ἀπιστήσητε·
θαυματοποιοὶ γὰρ οἱ ὄνειροι· ἡ ἑτέρα δὲ πρός με
ἀπιδοῦσα, Τοιγαροῦν ἀμείψομαί σε, ἔφη, τῆσδε τῆς
δικαιοσύνης, ὅτι καλῶς τὴν δίκην ἐδίκασας, καὶ ἐλθὲ
ἤδη, ἐπίβηθι τούτου τοῦ ὀχήματος,—δείξασά τι ὄχημα
ὑποπτέρων ἵππων τινῶν τῷ Πηγάσῳ ἐοικότων—ὅπως
εἰδῇς, οἷα καὶ ἡλίκα μὴ ἀκολουθήσας ἐμοὶ ἀγνοήσειν
ἔμελλες.

LUCIAN, *Vita.*

1. Parse ἀπεφηνάμην, ἀπολιπών, γεγηθώς, ἐνετρίψατο,
ἀπολειφθεῖσα, ἐπεπήγει, and μετεβέβλητο.

2. τέλος, *l.* 7. In what case, and why?

3. Νιόβην. Write a brief account of Niobe.

4. καλῶς. Give the comparative and superlative.

5. Πηγάσῳ. Write a brief account of Pegasus.

III.

Translate :

Ὣς φάτο, γήθησεν δὲ βοὴν ἀγαθὸς Διομήδης.
Ἔγχος μὲν κατέπηξεν ἐπὶ χθονὶ πουλυβοτείρῃ,
Αὐτὰρ ὁ μειλιχίοισι προσηύδα ποιμένα λαῶν·
"Ἦ ῥά νύ μοι ξεῖνος πατρώϊός ἐσσι παλαιός·
Οἰνεὺς γάρ ποτε δῖος ἀμύμονα Βελλεροφόντην
Ξείνισ᾽ ἐνὶ μεγάροισιν ἐείκοσιν ἤματ᾽ ἐρύξας.
Οἱ δὲ καὶ ἀλλήλοισι πόρον ξεινήϊα καλά·
Οἰνεὺς μὲν ζωστῆρα δίδου φοίνικι φαεινόν,

Βελλεροφόντης δὲ χρύσεον δ.... ἀμφικύπελλον,
Καί ... ν ἐγὼ κατέλειπον ἰὼν ... ...ασ᾽ ἐμοῖσιν.

<div align="right">HOMER Iliad, VI., vv. 213-221.</div>

1. Διομήδης. Write a brief account of Diomede.

2. Parse κατέπηξεν, προσηύδα, ἐσσι, ἐρύξας, πόρον, and μιν.

3. Derive πουλυβοτεί...η, μειλιχίοισι, and ἀμφικύπελλον.

4. Give the laws regulating the quantity of final α.

5. Distinguish the use of ... with the genitive, dative, and accusative.

<div align="center">IV.</div>

Translate :

" Δαιμονίη, μή μοί τι λίην ἀκαχίζεο θυμῷ·
Οὐ γάρ τίς μ᾽ ὑπὲρ αἶσαν ἀνὴρ Ἄϊδι προϊάψει·
Μοῖραν δ᾽ οὔ τινά φημι πεφυγμένον ἔμμεναι ἀνδρῶν,
Οὐ κακὸν, οὐδὲ μὲν ἐσθλὸν, ἐπὴν τὰ πρῶτα γένηται.
Ἀλλ᾽ εἰς οἶκον ἰοῦσα τὰ σ᾽ αὐτῆς ἔργα κόμιζε,
Ἱστόν τ᾽ ἠλακάτην τε, καὶ ἀμφιπόλοισι κέλευε
Ἔργον ἐποίχεσθαι. Πόλεμος δ᾽ ἄνδρεσσι μελήσει
Πᾶσιν, ἐμοὶ δὲ μάλιστα, τοὶ Ἰλίῳ ἐγγεγάασιν."
" Ὡς ἄρα φωνήσας κόρυθ᾽ εἵλετο φαίδιμος Ἕκτωρ
Ἵππουριν· ἄλοχος δὲ φίλη οἰκόνδε βεβήκει
Ἐντροπαλιζομένη, θαλερὸν κατὰ δάκρυ χέουσα.
Αἶψα δ᾽ ἔπειθ᾽ ἵκανε δόμους εὐναιετάοντας
Ἕκτορος ἀνδροφόνοιο, κιχήσατο δ᾽ ἔνδοθι πολλὰς
Ἀμφιπόλους, τῇσιν δὲ γόον πάσῃσιν ἐνῶρσεν.
Αἱ μὲν ἔτι ζωὸν γόον Ἕκτορα ᾧ ἐνὶ οἴκῳ·
Οὐ γάρ μιν ἔτ᾽ ἔφαντο ὑπότροπον ἐκ πολέμοιο
Ἵξεσθαι, προφ... ...όντα μένος καὶ χεῖρας Ἀχαιῶν.

<div align="right">HOMER, Iliad, VI., vv. 486-502.</div>

1. Parse πεφυγμένον, γένηται, ἐγγεγάασιν, ἐνῶρσεν, ἔφαντο, and ἵξεσθαι.

2. βεβήκει. What is the force of the tense ?

3. Give the ordinary forms of any dialectic varieties in this extract.

4. What changes in the Greek alphabet ?

5. State the different opinions, and the grounds thereof, as to the age of Homer.
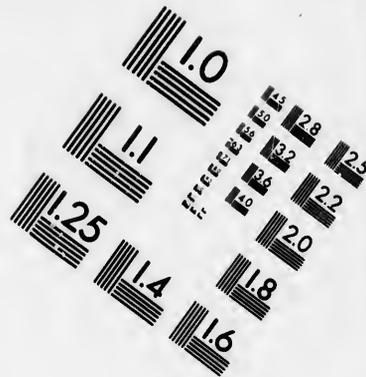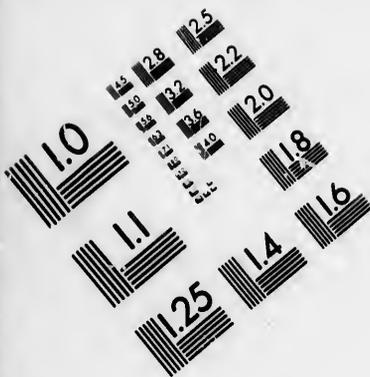
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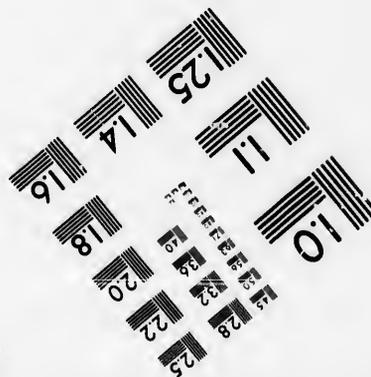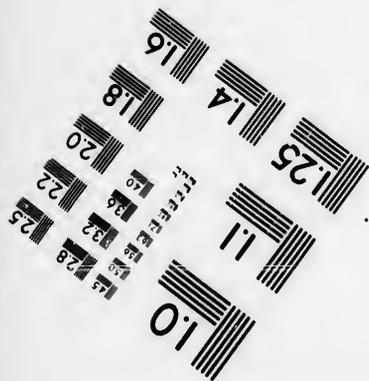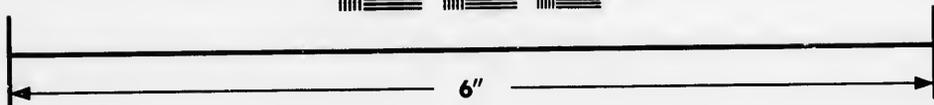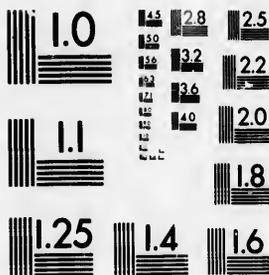
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ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

LATIN.

Examiners: { Rev. John McCaul, LL.D.
{ Thomas Moss, M.A.

I.

Translate:

Ecce gubernator sese Palinurus agebat:
Qui Libyco nuper cursu, dum sidera servat,
Exciderat puppi mediis effusus in undis.
Hunc ubi vix multa mæstum cognovit in umbra,
Sic prior alloquitur: " Quis te, Palinure, deorum
Eripuit nobis, medioque sub æquore mersit?
Dic age. Namque mihi, fallax haud ante repertus,
Hoc uno responso animum delusit Apollo,
Qui fore te ponto incolumem, finesque canebat
Venturum Ausonios. En hæc promissa fides est?"
Ille autem: " Neque te Phœbi cortina fefellit,
Dux Anchisiada, nec me deus æquore mersit.
Namque gubernaclum multa vi forte revulsum,
Cui datus hærebam custos, cursusque regebam,
Præcipitans traxi mecum. Maria aspera juro,
Non ullum pro me tantum cepisse timorem,
Quam tua ne, spoliata armis, excussa magistro,
Deficeret tantis navis surgentibus undis.
Tres notus hibernas immensa per æquora noctes
Vexit me violentus aqua; vix lumine quarto
Prospexi Italiam summa sublimis ab unda.

Paulatim adnabam terræ : jam tuta tenebam ;
Ni gens crudelis madida cum veste gravatum,
Prensantemque uncis manibus capita aspera montis,
Ferro invasisset, prædamque ignara putasset.

VIRGIL, *Æneis* vi., 337-361.

1. Distinguish between *sidus* and *stella*. Give Greek equivalents.

2. *Anchisiada.* What other form ?

3. *Cui hærebam cursusque regebam.* Explain the construction.

4. *Pro me.* What would be the more common expression ? Turn into Greek.

5. *Non ullum......cepisse timorem.* Give different constructions, and translate accordingly.

6. *Ignara putasset.* What other reading ?

7. *Summâ sublimis ab undâ.* Quote Homeric phrase.

8. From what incident narrated by Homer is this passage imitated ?

9. Give the derivations of *puppis, præcipito, magister, hiems, sublimis, tutus, uncus.*

II.

1. Mention any minor poems of Virgil.

2. How do you account for the fact that in the middle ages Virgil was considered a wizard ?

3. When does *quum* require the indicative, and when the subjunctive ?

4. Explain the terms *arsis, thesis* and *cæsura.*

III.

Translate :

Ti. Gracchus regnum occupare conatus est, vel regnavit is quidem paucos menses. Num quid simile populus Romanus audierat, aut viderat ? Hunc etiam post mortem secuti amici et propinqui, quid in P. Scipionem effecerint, sine lacrymis non queo dicere :

nam Carbonem, quoquo modo potuimus, propter recentem pœnam Ti. Gracchi, sustinuimus. De C. Gracchi autem tribunatu, quid exspectem, non libet augurari : serpit deinde res, quæ proclivius ad perniciem, cum semel cœpit, labitur. Videtis in tabella jam ante quanta sit facta labes, primo *Gabinia Lege*, biennio autem post, *Cassia*. Videre jam videor populum a senatu disjunctum multitudinisque arbitrio res maximas agi. Plures enim discent, quemadmodum hæc fiant, quam quemadmodum his resistatur. Quorsum hæc ? Quia sine sociis nemo quidquam tale conatur. Præcipiendum est igitur bonis, ut, si in ejusmodi amicitias ignari casu aliquo inciderint, ne existiment, ita se alligatos, ut ab amicis in magna aliqua re peccantibus non discedant : improbis autem pœna statuenda est : nec vero minor iis, qui secuti erunt alterum, quam iis, qui ipsi fuerint impietatis duces.

De Amicitia, ch. 12.

1. Give a brief account of the attempts made by T. Gracchus to raise the status of the plebs.

2. *P. Scipionem.* State what you know of him.

3. When and under what circumstances were tribunes first appointed ?

4. *Videtis in tabella.* Mention various *leges tabellariæ*.

5. *Gabinia Lege.* What was the purport of this law ?

IV.

1. To what school of Greek philosophy does Cicero most nearly assimilate ? Give reasons for your opinion.

2. Point out instances of the skill which he displays in the management of the dialogue in the De Amicitia.

3. State what you know of the principal speaker in this dialogue. Quote an allusion of Horace to him.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

GREEK.

HONORS.

Examiners : } REV. JOHN McCAUL, LL.D.
} THOMAS MOSS, M.A.

I.

Translate :

ΕΡΜ. Προΐωμεν, ὦ Πλοῦτε. τί τοῦτο; ὑποσκάζεις; ἐλελήθεις με, ὦ γεννάδα, οὐ τυφλὸς μόνον, ἀλλὰ καὶ χωλὸς ὤν.

ΠΛΟΥΤ. Οὐκ ἀεὶ τοῦτο, ὦ Ἑρμῆ, ἀλλ' ὁπόταν μὲν ἀπίω παρά τινα πεμφθεὶς ὑπὸ τοῦ Διός, οὐκ οἶδ' ὅπως βραδύς εἰμι καὶ χωλὸς ἀμφοτέροις, ὡς μόλις τελεῖν ἐπὶ τὸ τέρμα, προγηράσαντος ἐνίοτε τοῦ περιμένοντος, ὁπόταν δὲ ἀπαλλάττεσθαι δέῃ, πτηνὸν ὄψει, πολὺ τῶν ὀνείρων ὠκύτερον· ἅμα γοῦν ἔπεσεν ἡ ὕσπληγξ, κἀγὼ ἤδη ἀνακη- ρύττομαι νενικηκώς, ὑπερπηδήσας τὸ στάδιον οὐδὲ ἰδόντων ἐνίοτε τῶν θεατῶν.

ΕΡΜ. Οὐκ ἀληθῆ ταῦτα φής. ἐγώ γέ τοι πολλοὺς ἂν εἰπεῖν ἔχοιμί σοι χθὲς μὲν οὐδὲ ὀβολὸν, ὥστε πρίασθαι βρόχον, ἐσχηκότας, ἄφνω δὲ τήμερον πλουσίους καὶ πο- λυτελεῖς ἐπὶ λευκοῦ ζεύγους ἐξελαύνοντας, οἷς οὐδὲ κἂν ὄνος ὑπῆρξε πώποτε. καὶ ὅμως πορφυροῖ καὶ χρυσόχειρες περιέρχονται οὐδ' αὐτοὶ πιστεύοντες οἶμαι ὅτι μὴ ὄναρ πλουτοῦσιν.

ΠΛΟΥΤ. Ἑτεροῖον τοῦτ' ἐστίν, ὦ Ἑρμῆ, καὶ οὐχὶ τοῖς ἐμαυτοῦ ποσὶ βαδίζω τότε, οὐδὲ ὁ Ζεύς, ἀλλ' ὁ

Πλούτων ἀποστέλλει με παρ' αὐτοὺς ἅτε πλουτοδότης
καὶ μεγαλόδωρος καὶ αὐτὸς ὤν· δηλοῖ γοῦν καὶ τῷ ὀνόματι.
ἐπειδὰν τοίνυν μετοικισθῆναι δέῃ με παρ' ἑτέρου πρὸς
ἕτερον, ἐς δέλτον ἐμβαλόντες με καὶ κατασημηνάμενοι
ἐπιμελῶς φορηδὸν ἀράμενοι μετακομίζουσι· καὶ ὁ μὲν
νεκρὸς ἐν σκοτεινῷ πού τῆς οἰκίας πρόκειται ὑπὲρ τὰ
γόνατα παλαιᾷ τῇ ὀθόνῃ σκεπόμενος, περιμάχητος ταῖς
γαλαῖς, ἐμὲ δὲ οἱ ἐπελπίσαντες ἐν τῇ ἀγορᾷ περιμένουσι
κεχηνότες ὥσπερ τὴν χελιδόνα προσπετομένην τετριγότες
οἱ νεοττοί.

<div align="right">LUCIAN, <i>Timon.</i></div>

1. Parse ἐλελήθεις, ἀπίω, προγηράσαντος, ἔπεσεν, ἐσχη-
κότας, μετοικισθῆναι, κεχηνότες, τετριγότες.

2. What is the difference between ὁπότε and ὁπόταν?

3. Explain ὕσπληγξ and στάδιον.

4. What is the difference between κἂν ὄνος ὑπῆρξε, and
ὄνος ὑπῆρξε?

5. ὄναρ. Decline. What is the construction?

6. ἅτε. What is the corresponding Latin word?

7. δέλτον. What? Why so called?

8. τῆς οἰκίας. Why in genitive?

<div align="center">II.</div>

1. Give a list of prepositions governing one, two and three
cases.

2. What classes of verbs take a double accusative?

3. What are the laws for the formation of compounds,
especially as to the vowel ending the first part or beginning
the second?

4. Explain the use of the moods after conjunctions of
time.

<div align="center">III.</div>

Translate :

Ὄφρ' ὅ γε ταῦτ' ἐπονεῖτο ἰδυίῃσι πραπίδεσσιν,
Τόφρα οἱ ἐγγύθεν ἦλθε θεὰ Θέτις ἀργυρόπεζα.
Τὴν δὲ ἴδε προμολοῦσα Χάρις λιπαροκρήδεμνος
Καλή, τὴν ὤπυιε περικλυτὸς Ἀμφιγυήεις.

Ἔν τ' ἄρα οἱ φῦ χειρί, ἔπος τ' ἔφατ', ἔκ τ' ὀνόμαζεν.
"Τίπτε, Θέτι τανύπεπλε, ἱκάνεις ἡμέτερον δῶ
Αἰδοίη τε φίλη τέ ; πάρος γε μὲν οὔ τι θαμίζεις.
Ἀλλ' ἔπεο προτέρω, ἵνα τοι πὰρ ξείνια θείω."
Ὣς ἄρα φωνήσασα πρόσω ἄγε δῖα θεάων.
Τὴν μὲν ἔπειτα καθεῖσεν ἐπὶ θρόνου ἀργυροήλου
Καλοῦ δαιδαλέου· ὑπὸ δὲ θρῆνυς ποσὶν ἦεν·
Κέκλετο δ' Ἥφαιστον κλυτοτέχνην, εἶπέ τε μῦθον·
"Ἥφαιστε, πρόμολ' ὧδε. Θέτις νύ τι σεῖο χατίζει."
Τὴν δ' ἠμείβετ' ἔπειτα περικλυτὸς Ἀμφιγυήεις·
"Ἦ ῥά νύ μοι δεινή τε καὶ αἰδοίη θεὸς ἔνδον,
Ἥ μ' ἐσάωσ', ὅτε μ' ἄλγος ἀφίκετο τῆλε πεσόντα
Μητρὸς ἐμῆς ἰότητι κυνώπιδος, ἥ μ' ἐθέλησεν
Κρύψαι χωλὸν ἐόντα. Τότ' ἂν πάθον ἄλγεα θυμῷ,
Εἰ μή μ' Εὐρυνόμη τε Θέτις θ' ὑπεδέξατο κόλπῳ,
Εὐρυνόμη θυγάτηρ ἀψορρόου Ὠκεανοῖο.
Τῇσι παρ' εἰνάετες χάλκευον δαίδαλα πολλά,
Πόρπας τε γναμπτάς θ' ἕλικας κάλυκάς τε καὶ ὅρμους
Ἐν σπῆϊ γλαφυρῷ· περὶ δὲ ῥόος Ὠκεανοῖο
Ἀφρῷ μορμύρων ῥέεν ἄσπετος· οὐδέ τις ἄλλος
Ἤδεεν οὔτε θεῶν οὔτε θνητῶν ἀνθρώπων,
Ἀλλὰ Θέτις τε καὶ Εὐρυνόμη ἴσαν, αἵ μ' ἐσάωσαν.
"Ἦ νῦν ἡμέτερον δόμον ἵκει· τῷ με μάλα χρεὼ
Πάντα Θέτι καλλιπλοκάμῳ ζωάγρια τίνειν.
Ἀλλὰ σὺ μὲν νῦν οἱ παράθες ξεινήϊα καλά,
Ὄφρ' ἂν ἐγὼ φύσας ἀποθείομαι ὅπλα τε πάντα."

HOMER, *Iliad*, xviii., vv. 380-409.

1. Parse ἰδυίῃσι, ὤπυιε, καθεῖσεν, πάθον, ἤδεεν, ἴσαν, παρά-θες, ἀποθείομαι.

2. Give the ordinary forms of the dialectic varieties in this extract.

3. What proofs that the digamma was sounded in the time of Homer ?

4. What instances of the use of *crasis* in his poems ?

5. Where does he admit *hiatus* ?

6. Give the dialectic varieties of the present indicative, infinitive and imperative of εἰμί.

7. Explain the meaning and use of the suffix φι or φιν.

8. What indications in the Iliad of additions to the original poem ?

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

LATIN.
HONORS AND SCHOLARSHIPS.

Examiners: { REV. JOHN MCCAUL, LL.D.
THOMAS MOSS, M.A.

I.

Translate :

Haec ubi dicta dedit, solio se tollit ab alto;
Et primum Herculeis sopitas ignibus aras
Excitat, hesternumque Larem parvosque Penates
Laetus adit; mactant lectas de more bidentes
Euandrus pariter, pariter Troiana juventus.
Post hinc ad navis graditur, sociosque revisit;
Quorum de numero, qui sese in bella sequantur,
Praestantis virtute legit; pars cetera prona
Fertur aqua, segnisque secundo defluit amni,
Nuntia ventura Ascanio rerumque patrisque.
Dantur equi Teucris Tyrrhena petentibus arva;
Ducunt exsortem Aeneae, quem fulva leonis
Pellis obit totum, praefulgens unguibus aureis.
Fama volat parvam subito volgata per urbem,
Ocius ire equites Tyrrheni ad litora regis.
Vota metu duplicant matres, propiusque periclo
It timor, et major Martis jam adparet imago.
Tum pater Euandrus dextram complexus euntis
Haeret, inexpletus lacrimans, ac talia fatur :
O mihi praeteritos referat si Jupiter annos,
Qualis eram, cum primam aciem Praeneste sub ipsa
Stravi scutorumque incendi victor acervos,
Et regem hac Erulum dextra sub Tartara misi,
Nascenti cui tres animas Feronia mater—
Horrendum dictu—dederat, terna arma movenda;

Ter leto sternendus erat ; cui tum tamen omnis
Abstulit haec animas dextra, et totidem exuit armis :
Non ego nunc dulci amplexu divellerer usquam,
Nate, tuo ; neque finitimo Mezentius umquam
Huic capiti insultans tot ferro saeva dedisset
Funera, tam multis viduasset civibus urbem.

Æneid, viii. 541-571.

1. *Herculeis.* What difficulty in this reading? Explain the reading, *Herceis.*

2. *Lares, Penates.* From what sources was their worship derived ?

3. *Propius periclo it timor.* Give different explanations.

4. *Praeneste.* What is the modern name? What celebrated temple in the town ? Why were the people nicknamed *Nuculæ?*

5. *Scutorum.* How did the *scutum* differ in form from the *Clipeus?* What is the corresponding Greek term ?

6. *Tyrrhenis.* What is supposed to have been the origin of this people ? Give a brief sketch of their political constitution.

7. *Nate.* When is the form *gnatus* inadmissible ?

8. Give the derivations of *ara, hesternus, macto, cetera, pronus, nuncius, imago, letum, segnis, acies, sopor.*

9. Distinguish between *inter cædes Rutulorum* and *inter cædem Rutulorum.*

II.

1. Point out differences in epic treatment between the Iliad and the Æneid.

2. Prove from the 8th Book that *interdum dormitat Virgilius.*

3. Under what restrictions is the hiatus admitted by Virgil ?

4. Give biographies of Ennius and Livius Andronicus.

III.

Translate :

Age vero, illa res quantam declarat ejusdem hominis apud hostes populi Romani auctoritatem quod ex locis

tam longinquis, tamque diversis, tam brevi tempore
omnes uni huic se dediderunt? quod Cretensium legati,
cum in eorum insula noster imperator exercitusque esset,
ad Cn. Pompeium in ultimas prope terras venerunt,
eique se omnes Cretensium civitates dedere velle dix-
erunt? Quid idem iste Mithridates? nonne ad eundem
Cn. Pompeium, legatum usque in Hispaniam misit?
eum quem Pompeius legatum semper judicavit: ii,
quibus semper erat molestum, ad eum potissimum esse
missum, speculatorem, quam legatum judicari maluerunt.
Potestis igitur jam constituere, Quirites, hanc auctori-
tatem, multis postea rebus gestis, magnisque vestris
judiciis amplificatam, quantum apud illos reges, quantum
apud exteras nationes valituram esse existimetis.

Reliquum est, ut de felicitate, quam praestare de se
ipso nemo potest, meminisse et commemorare de altero
possumus, sicut aequum est homini de potestate deorum,
timide et pauca dicamus. Ego enim sic existumo.
Maximo, Marcello, Scipioni, Mario, et ceteris magnis
imperatoribus, non solum propter virtutem, sed etiam
propter fortunam, saepius imperia mandata, atque exer-
citus esse commissos. Fuit enim profecto quibusdam
summis viris quaedam ad amplitudinem et gloriam, et
ad res magnas bene gerendas divinitus adjuncta fortuna:
de hujus autem hominis felicitate, quo de nunc agimus,
hac utar moderatione dicendi, non ut in illius potestate
fortunam positam esse dicam, sed ut praeterita memin-
isse, reliqua sperare videamur, ne aut invisa diis
immortalibus oratio nostra, aut ingrata esse videatur.

CICERO, *pro leg. Man.*, *c.* 16.

1. *Cretensium legati.* Give the true statement of this
affair.

2. *Noster imperator.* Who?

3. What was the exact technical meaning of *imperium*?
How only could it be conferred?

4. *Usque in Hispaniam.* In what was Pompey then en-
gaged?

5. *Iste Mithridates.* Mention the principal senses in
which *iste* is used.

6. *Vestris judiciis.* Give instances.

7. *Maximo, Scipioni.* Write brief notices of these commanders.

8. *Nunc agimus.* Translate *agere cum populo.*

IV.

1. Who were the principal opponents of the Manilian law?

2. What was a *rogatio?* Explain the formulae with which it always commenced and terminated. What was *adrogatio?*

3. How does Sallust describe the character of Pompey?

4. Distinguish between the gerund and the gerundive; and explain the origin of the latter.

5. Give a sketch of the second Mithridatic war.

University of Toronto.

FIRST YEAR.

EUCLID.

Examiner: REV. W. JONES, B.A.

1. On the same base and on the same side of it, there cannot be two triangles which have their sides which are terminated in one extremity of the base, equal to one another, and likewise those which are terminated in the other extremity.

2. Any two sides of a triangle are together greater than the third side.

Shew, without using any proposition beyond the first book of Euclid, that two circles which have not a common centre cannot cut one another in more points than two.

3. If two triangles have two angles of the one equal to two angles of the other, each to each, and have also those sides equal which are adjacent to equal angles in each, then shall the other sides be equal, each to each; and also the third angle of the one to the third angle of the other.

D and E are the middle points of AB, AC, sides of a triangle ABC; in BC or BC produced, any point F is taken; FD, FE produced meet a line drawn through A parallel to BC in G, H respectively; shew that GH is equal to BC.

4. If a side of a triangle be produced, the exterior angle is equal to the two interior and opposite angles; and the three interior angles of every triangle are equal to two right angles.

If from two of the angles of a triangle perpendiculars be drawn upon the opposite sides, the third angle of the tri-

angle is equal to the sum of the angles contained by the side opposite to it and the two perpendiculars.

5. To divide a straight line into two parts, so that the rectangle contained by the whole and one of the parts may be equal to the square on the other part.

If a line be thus divided, shew that the rectangle contained by the difference of the parts and the greater part equals the square on the other part.

6. The angle at the centre of a circle is double of the angle at the circumference on the same base, that is, on the same part of the circumference.

Two lines which cut a circle intersect; shew that the angle between them equals the semi-sum, or semi-difference of the angles subtended by the intercepted arcs at the centre of the circle, according as the point of section falls within or without the circle.

7. The angles in the same segment of a circle are equal to one another.

Construct a triangle, having given one angle, the side opposite to it, and the point in which the bisector of the given angle meets the given side.

8. If from any point without a circle two straight lines are drawn, one of which cuts the circle, and the other touches it; the rectangle contained by the whole line which cuts the circle, and the part of it without the circle, shall be equal to the square on the line which touches it.

A straight line BC of given length is intercepted between two straight lines AB, AC given in position, and two circles are drawn touching each of the three; shew that for all positions of BC, the part of AB intercepted between the points of contact of the circles is constant.

9. To describe an isosceles triangle, having each of the angles at the base double of the third angle.

In the figure of this proposition, let the two circles meet in D and E, and let ABD be the triangle required shew that if a tangent at A meet BD produced in F, AFD is a triangle having the required property.

Shew also that if BA be produced to meet the circle again in G, and GE be joined and produced to meet BD in K, GBK is another such triangle.

10. If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the

base shall have the same ratio which the other sides of the triangle have to one another.

Construct a triangle having given one angle, the side opposite to it, and the ratio of the other two sides.

11. Similar triangles are to one another in the duplicate ratio of their homologous sides.

Through a point in the side of a triangle draw a line cutting off a quarter of the triangle.

12. The rectangle contained by the diagonals of a quadrilateral figure inscribed in a circle is equal to both the rectangles contained by its opposite sides.

University of Toronto.

FIRST YEAR.

ALGEBRA.

Examiner: J. B. Cherriman, M.A.

1. State the reasoning by which the truth of the following formulas is established :

$$ab = ba \; ; \; a(b+c) = ab + ac \; ; \; a^m.a^n = a^{m+n}.$$

What are the values of the quantities $0 \times a, \dfrac{a}{0}, a^0, 0^a$ for different values of a ?

Find the values of

$$\tfrac{1}{2}x\left(1 + \frac{1}{a^{n-1}}\right) \cdot \left\{ b - (-b)^{-2n} \right\} + \frac{y}{2}(b + n^a b)$$

first, when $n = \tfrac{1}{2}$, $a = 0$, $b = 1$; second, when $n = 1$, $b = -1$.

2. Investigate Horner's method of division, and show how it may be used in finding the value of $f(a)$, where $f(x)$ is any rational and integral function of x.

Shew that whether we divide $f(x)$ by $ax + b$ or by $x + \dfrac{b}{a}$, the remainder in either case will be the value of $f\left(-\dfrac{b}{a}\right)$.

3. Prove the rule for finding the least common multiple of two or more Algebraic quantities.

If a, b, c be three quantities, having respectively the factors a, β, γ such that no two have any common measure, and L_1, L_2, L_3 be the least common multiples of (b, c), (c, a), (a, b) respectively, prove

$$aL_1 = \beta L_2 = \gamma L_3.$$

4. Shew how the magnitude of a fraction is altered by increasing or diminishing both its terms by the same quantity.

Show that a proper fraction is less diminished by adding the same quantity to both its terms than it is increased by subtracting that quantity from each term.

Trace the changes of magnitude of $\left(\frac{a}{b}\right)^n$ and $\left(\frac{a}{b}\right)^{\frac{1}{n}}$ as n changes from $+\infty$ to $-\infty$.

5. Prove that every quadratic equation has two roots, and investigate a rule for finding them.

Find the condition that the equation $(a - x)(b - x) = c^2$ may have its roots equal.

6. If $a : b :: c : d$. then will
$$pa + qb : ma + nb :: pc + qd : mc + nd ;$$
and $pa^2 + qab : mab + nb^2 :: \dfrac{pc+qd}{pb+md} : \dfrac{mc+nd}{pa+mc}$.

7. Explain the notation called "Variation."

If $a^2 + b^2 \infty bc$, and $ac \infty b^2$, then $\dfrac{a^3}{b^3} + \dfrac{a}{b}$ is invariable.

8. When are three quantities said to be in arithmetic, geometric, or harmonic progression? In each case, given two of the quantities, show how to find the remaining one.

The equation $ax^2 + 2bx + c = 0$, will have its roots real and unequal, equal, or imaginary, according as a, b, c are in the above progressions respectively.

9. Investigate a formula by which the sum of n quantities in arithmetic progression can be found.

The sum of the successive odd numbers, commencing with $2p + 1$, and ending with $2q - 1$, is $q^2 - p^2$.

10. Shew how to find the sum of a series of quantities in geometric progression; and the limit of this sum when the series is prolonged indefinitely, the ratio being a proper fraction.

This ratio being $\dfrac{a}{b}$, shew that the sum $ad\ inf$: can be relied upon as giving correctly the first n figures for the sum of n terms, when $\left(\dfrac{b}{a}\right)^n > 100\ldots\ldots001$, ($n$ zeros.)

11. (a) .... Multiply together the following :
$$x^2 - \tfrac{3}{2}x - 1,\ 2x^2 + 4x + \tfrac{3}{2},\ x^2 - \tfrac{1}{2}x - 3 ;$$
and extract the square root of the product.

(β) .... Divide, by Horner's method

$$1 + x + 45x^6 + 135x^7 \text{ by } 1 + 3x + 4x^2,$$

and continue the quotient as far as x^{11}, giving the finite remainder then left.

(γ) .... Find the greatest common measure of

$$1 - x + y + z - xy + yz - zx - xyz,$$
$$\text{and} \quad 1 - x - y - z + xy + yz + zx - xyz;$$

and shew that their least common multiple is a complete square if $x = y^2 + z^2 - y^2 z^2$.

12. Reduce to lowest terms :

(a) .... $\dfrac{32x^2 + x - 4 - 8x^3}{x^2 - 5x + 5 - x^3} \left(\dfrac{\dfrac{x-1}{x+2} + \dfrac{x+3}{x-4}}{\dfrac{1+2x}{1-x} - \dfrac{1+6x}{2+x}} \right)$;

(β) ... . $\dfrac{1}{(b+c-2a)(c+a-2b)}$ + anal + ...

13. Solve the equations :

(a) .... $\frac{1}{2}(x - 1) - \frac{1}{3}(x - 2) = \frac{1}{4}(x - 3) - \frac{1}{5}(x - 4)$;

(β) .... $(10^4 - x)^2 + 10^4(x^2 + 1) = x^2 + 100000001$;

(γ) .... $(x + a)(x + b) = (a + c)(b + c)$;

(δ) .... $\sqrt{a + bx} - \sqrt{c + dx} = \sqrt{\dfrac{(a - c)(b - d)}{a + c}}x.$

14. Sum

(a) ... ... $-\left(1 + \dfrac{n}{2}\right) - \left(2 + \dfrac{n-1}{2}\right) - \left(3 + \dfrac{n-2}{2}\right) -$

.... to n terms ;

(β) ...... $(1 + \sqrt{\frac{1}{2}}) + \frac{1}{2} + \frac{1}{2}(1 - \sqrt{\frac{1}{2}}) + ...$ to n terms.

(γ) .... $\sqrt[4]{\dfrac{27}{8}} - \sqrt{\dfrac{3}{2}} + \sqrt[4]{\dfrac{3}{2}} - ....$

to infinity.

15. A pamphlet, when set up in type, is found to contain 2000 lines, and will make a certain number of pages ; but by closing up the lines so as to get into each page one-fifth more and one over, the number of pages can be diminished by 20. How many were there ?

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University of Toronto.

ANNUAL EXAMINATIONS : 1864.

FIRST YEAR.

TRIGONOMETRY.

Examiner : J. B. CHERRIMAN, M.A.

1. State the rule for finding the characteristic of a logarithm, and prove that the mantissa is unaffected by any change of the position of the decimal point in the number.

If the base of the system of logarithms were such that the characteristic of log 10 is 2, what may the characteristic of log 100 be, and what must be the least value of the base that it may be 4 ?

2. Prove the rules for performing multiplication and involution by aid of logarithms.

Given log 2 and log 3, find the logarithms of
$$0\cdot5, \ 60, \ 0\cdot8, \ 250, \ 4\cdot5.$$

Since log $(0\cdot5) = -$ log 2, why have not the logarithms of 2 and 0·5 the same mantissa ?

3. Perform the following operations by logarithms :

(a) .... Multiply 123·45 into 5·4321 ;

(β) .... Find the value of $\dfrac{(1\cdot2345)^5}{67059}$;

(γ) .... Find $\sqrt[3]{\dfrac{5}{6}}$.

How many zeros will follow the decimal point in the hundredth root of 0·2 ?

4. Define the trigonometrical ratios of an angle less than 90°.

How are these definitions extended for an angle greater than 90° and less than 180° ?

Why need not the tables be extended beyond 90° ?

Write down the five independent relations connecting the ratios of an angle.

5. Find tan 45° and sin 30°.

Deduce from them sin 45° and tan 30°.

Write down the tabular logarithms of these quantities.

Having given the tabular logarithms of the sines of all angles up to 90°, shew how those of the other ratios of these angles can be found.

6. State the different cases that arise in the solutions of right-angled triangles, and solve one of them.

A ladder rests between a wall and the ground at an angle of 45°; if its foot is moved half way towards the wall, through what angle will the ladder have revolved? Shew that the top will have moved ($\sqrt{7}-2$) times as much as the foot.

7. Prove the formulas:

(a) .... $\sin (A+B) = \sin A \cos B + \cos A \sin B$;

(β) .... $2 \sin^2 A = 1 - \cos 2A$;

(γ) .... $\dfrac{\sin A + \sin B}{\sin A - \sin B} = \dfrac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)}$;

(δ) .... $\sin A \cos 2B + \cos 2A \sin B =$
$\sin \frac{3}{2}(A+B) \cos \frac{1}{2}(B-A) + \cos \frac{3}{2}(A-B) \sin \frac{1}{2}(B-A)$.

8. How many independent relations connect the six parts of a triangle? When three parts are given, in what cases may they fail to give a distinct triangle?

If the angle A be obtuse, shew that no triangle can exist unless $\dfrac{a}{b} > \dfrac{\cos A'}{\cos B}$, where A' is the supplement of A.

9. In any triangle, prove the relations:

(a) .... $\dfrac{\sin A}{a} = \dfrac{\sin B}{b} = \dfrac{\sin C}{c}$;

(β) .... $c = b \cos A + a \cos B$;

(γ) .... $\tan \dfrac{A-B}{2} = \dfrac{a-b}{a+b} \cot \dfrac{C}{2}$;

(δ) .... $\tan \dfrac{C}{2} = \sqrt{\dfrac{(s-a)(s-b)}{s(s-c)}}$, ($s$ the semiperimeter.)

(ϵ) .... $\cos \dfrac{A}{2} \cos \dfrac{B}{2} \cos \dfrac{C}{2} (\cot A + \cot B + \cot C)$
$= \dfrac{(a+b+c)(a^2+b^2+c^2)}{8\,abc}$.

10. Solve the following triangles :

(α) .... $a = 209\cdot88, b = 333\cdot33, C = 122^\circ 26'$.

(β) .... $a = 753.09, b = 333\cdot33, c = 666\cdot66$.

(γ) .... $A = 57^\circ34', a = 54\cdot321. b = 87\cdot654$.

(δ) .... $A = 57^\circ34', a = 47\cdot979, b = 54\cdot321$.

11. A person coming straight down an incline notes the distance between two points of his descent. On reaching the foot of the incline, he walks straight on along the horizontal plane for a known distance, and then measures the angles of elevation of the two points. Shew that he is able to calculate the angle of the incline, and the heights of the two points above his level.

Num.	Log.	Angle.	Log.	
12345	09149	7°07'	tan	9·09639
15000	17609	13"08	tan	9·36795
20000	30103	15"18	sin	9·42139
20988	32197	21"40	cosec	10·43273
30000	47712	31"07	tan	9·78077
42755	63099	45"45	tan	10·01137
43269	63618	49"34	sin	9·88148
47979	68105	57"34	sin	9·92635
50000	69897	———	cosec	10·07365
54321	73497	61"13	cot	9·73987
60000	77815	69"18	cos	9·54836
67059	82646	72"52	sin	9·98029
87654	94277			
94105	97361			

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ALGEBRA AND TRIGONOMETRY.
HONORS AND SCHOLARSHIPS.

Examiner: REV. W. JONES, B.A.

1. Find by means of indeterminate multipliers the value of z which satisfies the simultaneous equations,

$$\left.\begin{array}{l} a_1\,x + b_1\,y + c_1\,z = d_1 \\ a_2\,x + b_2\,y + c_2\,z = d_2 \\ a_3\,x + b_3\,y + c_3\,z = d_3 \end{array}\right\}$$

Solve the equations :

(i.) $(x+a+b)^3 + (x+b+c)^3 + (x+c+a)^3$
$= 3\,(x+a+b)\,(x+b+c)\,(x+c+a)$.

(ii.) $\sqrt[3]{x-a} + \sqrt[3]{x-b} = \sqrt[3]{2x-a-b}$:

2. Shew how to express a given mixed number in any scale.

Express $7593 \cdot 7$ in the scale whose radix is 6. What number will be expressed by the same two digits in each of the scales of 5 and 7 ?.

If a number, exppressed in the common scale, be denoted by the digits $p_0,\ p_1,\ p_2,\ \ldots\ldots$ beginning with the unit digit, shew that it will be divisible by 12, when $p_0 - 2p_1 + 4\,(p_2 + p_3 + \ldots)$ is so divisible.

3. Investigate the general term of the expansion of $(a_0 + a_1 x + a_2 x^2 + \ldots\ldots)^n$, where n is positive or negative, integral or fractional.

If $c_0,\ c_1,\ c_2 \ldots\ldots$ be the coefficients in the expansion of $(1 + x + x^2)^n$, then

$$c_0\,c_{2r} - c_1\,c_{2r-1} + c_2\,c_{2r-2} - \ldots + (-1)^{r-1}\,c_r + 1\,c_{r-1} = \frac{c_r}{2}\left\{1 - (-)^r\,c_r\right\}$$

4. If the denominators of the fractions $\frac{a_1}{b_1}$, $\frac{a_2}{b_2}$, ... $\frac{a_n}{b_n}$ have all the same sign, shew that the fraction $\frac{a_1+a_2+ \ldots +a_n}{b_1+b_2+ \ldots +b_n}$ lies between the greatest and least of the original fractions.

Shew also that if there be n positive quantities, a, b, c, ... which are not all equal, then

$$\frac{a+b+c+ \ldots}{n} > (abc \ldots)^{\frac{1}{n}}.$$

5. If $A+Bx+Cx^2+ \ldots = a+bx+cx^2 + \ldots$ for all values of x, shew that $A=a$, $B=b$, $\&c=\&c$. Employ this principle

(i.) To separate into partial fractions $\dfrac{x^3-2x}{(x-1)^3 (x+2)}$

(ii.) To sum to n terms the series $1.2+2.3+3.4+ \ldots$.

6. State and prove Fermat's theorem.

If m and n are prime numbers, shew that $m^{n-1} + n^{m-1} - 1$ is divisible by mn.

7. Prove by a geometrical construction that
$$\tan (A + B) = \frac{\tan A + \tan B}{1 - \tan A . \tan B}.$$

Prove also the formula $2 \sin^{-1} x = \text{vers}^{-1} 2x^2$, and shew that if $\sin (\theta-a) \sin (\theta-\beta) = \sin a \sin \beta$, then
$$\tan \theta = \tan (a+\beta), \text{ unless } \theta = n \pi.$$

8. Shew that if θ be the circular measure of an angle less than $90°$, $\sin \theta < \theta$ and $> \theta - \dfrac{\theta^3}{4}$.

Shew that the limit of $\cos \dfrac{\theta}{2} . \cos \dfrac{\theta}{2^2} \ldots \cos \dfrac{\theta}{2^n}$, when n is infinite, is $\dfrac{\sin \theta}{\theta}$.

If $f (\theta)$ be a function of θ given by the equation $f (2\theta)= (1 - \tan^2\theta) f (\theta)$, and if $f (0) = m$, shew that $f (\theta) = m\theta \cot \theta$.

9. Find a formula which will include all angles having a given sine. Solve the equation $\cos \theta - \sin 5\theta = \cos 3 \theta - \sin 3 \theta$.

10. Define the base of the Napierian system of logarithms, and expand $\log_e (1+x)$ in ascending powers of x.

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11. Obtain exponential expressions for the sine and cosine.
From the equivalence of the expansions of

$$\log \left(1 - x\, e^{\theta \sqrt{-1}}\right) + \log \left(1 + x\, e^{-\theta \sqrt{-1}}\right)$$
$$\text{and } \log \left\{1 - x\left(2\sqrt{-1}\sin\theta + x\right)\right\}$$

obtain the expansion of $\cos 2n\theta$ and of $\sin(2n+1)\theta$ in terms of powers of $\sin\theta$.

12. Sum to n terms the series

$$\cos a + \cos(a+\beta) + \cos(a+2\beta) + \ldots\ldots,$$

and shew that

$$\sin a + \sin 3a + \sin 5a + \ldots \text{ to } n \text{ terms } = \frac{\sin^2 na}{\sin a}.$$

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University of Toronto.

FIRST, SECOND, AND THIRD YEARS, AND CANDIDATES FOR B.A.

PROBLEMS.

HONORS.

Examiners: $\begin{cases} \text{J. B. CHERRIMAN, M.A.} \\ \text{REV. W. JONES, B.A.} \end{cases}$

1. If a trapezium be inscribed in a circle, the line joining the centre of the circle with the intersection of its diagonals is perpendicular to its parallel sides.

2. The middle points E and F of AB, BC sides of a square $ABCD$, being joined with D and A respectively, ED and FA intersect in G; shew that a circle may be described about $EBFG$, and that the length of a tangent drawn to it from D is equal to the side of the square.

3. Upon the sides of a triangle as diameters circles are described; shew that their three common chords intersect in a point.

4. If $\dfrac{x^2 - yz}{x - xyz} = \dfrac{y^2 - xz}{y - xyz}$, shew that each of these fractions, is equal to $\dfrac{z^2 - xy}{z - xyz}$, to $x + y + z$, and to $\dfrac{1}{x} + \dfrac{1}{y} + \dfrac{1}{z}$.

5. Eliminate x, y, z from the equations
$$\left. \begin{aligned} ax &= c'y + b'z \\ by &= a'z + c'x \\ cz &= b'x + a'y \end{aligned} \right\}.$$

6. If $ax^3 + 3\,bx^2 + 3\,cx + d$ contain $ax^2 + 2bx + c$ as a factor, and the latter be a complete square, the former will be a complete cube.

7. If
$$x = bz + cy \\ y = cx + az \\ z = ay + bx$$

prove

(i) ... $\dfrac{1-a^2}{x^2} = \dfrac{1-b^2}{y^2} = \dfrac{1-c^2}{z^2}$.

(ii) ... $\dfrac{\sqrt{1-a^2}}{a} + \dfrac{\sqrt{1-b^2}}{b} + \dfrac{\sqrt{1-c^2}}{c}$

$= \dfrac{\sqrt{1-a^2}}{a} \cdot \dfrac{\sqrt{1-b^2}}{b} \cdot \dfrac{\sqrt{1-c^2}}{c}$.

8. In any scale of notation, radix r, the $(r-1)$ digits are formed into any number of numbers, each digit being used once and only once ; given that the sum of these numbers lies between pr and $(p+1)r$, shew that it is $pr+s$, where s is the number which must be added to the sum of the digits in the lower limit to make it divisible by $(r-1)$.

9. A train in consequence of meeting with an accident is obliged to lessen its speed ; had the accident occurred a miles further back, the train would have been p minutes later than it was in arriving at the terminus ; and if b miles further on, it would have been q minutes earlier. Shew that the difference of the times of running a mile before and after the accident is $\dfrac{p+q}{a+b}$ minutes.

10. Prove,

(i) ... $1 + \dfrac{2}{9} + \dfrac{2.8}{9.18} + \dfrac{2.8.14}{9.18.27} + \ldots\ldots$ ad inf: $= \sqrt[3]{3}$.

(ii) ... $1 - \dfrac{n-1}{3} + \dfrac{(n-1)(n-2)}{3.4} - \dfrac{(n-1)(n-2)(n-3)}{3.4.5} + \ldots$

$= \dfrac{2}{n+1}$, n a positive integer .

11. If $\dfrac{n(n+1)(n+2) \ldots\ldots \text{ to } r \text{ factors}}{\lfloor r}$ be denoted by $f(n,r)$,

and $\dfrac{n(n-1)(n-2) \ldots\ldots \text{ to } r \text{ factors}}{\lfloor r}$ $\ldots\ldots\ldots\ldots \phi(n,r)$,

prove $f(n, 2r) + f(n, 2r-1)\phi(n, 1) + f(n, 2r-2) \phi(n, 2) + \ldots\ldots$
$= \phi(2n, 2r) + \phi(2n, 2r-2)f(n,1) + \phi(2n, 2r-4)f(n, 2) + \ldots$

12. A number and its rth power will end with the same digit when r is any power of 5.

13. Each person of a given party puts his gloves into a bag, and a pair is then distributed to each at random ; find the chance,

(1,) that every person gets his own; (2,) that a specified individual does so.

14. Prove that in any triangle

$$\frac{a+b-c}{\sin\dfrac{A}{2}\,\sin\dfrac{B}{2}\,\cos\dfrac{C}{2}} = \text{anal} = \ldots\ldots\ldots$$

$$= \frac{a+b+c}{\cos\dfrac{A}{2}\,\cos\dfrac{B}{2}\,\cos\dfrac{C}{2}}.$$

15. If R, r, r_1, r_2, r_3 be the respective radii of the circumscribed, the inscribed, and the three escribed circles of a triangle, shew that the area of the triangle is equal to $\sqrt{rr_1r_2r_3}$; also that the area of the triangle formed by joining the centres of the escribed circles is equal to

$$2R\left\{ (b+c)\sin^2\frac{A}{2} + (c+a)\sin^2\frac{B}{2} + (a+b)\sin^2\frac{C}{2} \right\}.$$

16. A person walking along a road observes that two trees have their greatest angular elevations a, a' at the same point; after walking on a certain distance, he again observes their elevations to be β, β' respectively; if h, h' be their respective heights, shew that

$$\frac{h}{h'} = \left\{ \frac{\cot^2\beta - \cot^2 a}{\cot^2\beta' - \cot^2 a'} \right\}^{-\frac{1}{2}}.$$

17. Two circles of radii a, b intersect, $2h$ being the length of their common chord, and c the distance between their centres, shew that the area common to both is equal to

$$a^2\sin^{-1}\frac{h}{a} + b^2\sin^{-1}\frac{h}{b} - hc.$$

18. If $p, q, r; p', q', r'$, be the respective distances from A, B, C, the angular points of a triangle, of the intersection of the perpendiculars from those points on the opposite sides, and of that of the bisectors of the angles of the triangle; shew that

$$pa+qb+rc = 2\left(p'q'\cos\frac{C}{2} + q'r'\cos\frac{A}{2} + r'p'\cos\frac{B}{2} \right).$$

19. Sum to n terms the series

$$\frac{\sin 3A}{\cos^2 A\cos^2 2A} + \frac{\sin 5A}{\cos^2 2A\cos^2 3A} + \frac{\sin 7A}{\cos^2 3A\cos^2 4A} + \ldots\ldots$$

also prove that

$$\tan^2 a - \frac{\tan^4 a}{2} + \frac{\tan^6 a}{3} - \ldots\ldots$$

$$= \sin^2 a + \frac{\sin^4 a}{2} + \frac{\sin^6 a}{3} + \ldots\ldots$$

both series being continued *ad infinitum*.

University of Toronto:

FIRST YEAR.

ENGLISH.

Examiners: $\begin{cases} \text{D. Wilson, LL.D.} \\ \text{J. A. Boyd, M.A.} \end{cases}$

*** *Answers to all the questions are not indispensable; but* FULL ANSWERS *are required to as many as can be overtaken within the time.*

1. Define and give examples of the relations of English orthography, 1st, to etymology; 2nd, to euphonic changes in compound words.

2. Latham states that the differences between the English alphabet, and those from which it is derived are referable to:—(*a*) ejection, (*b*) addition, (*c*) change of power, (*d*) change of order. Illustrate each; and trace the history of the alphabet in relation to the diverse sources of the English vocabulary, and its imperfect adaptation to the sounds in the language.

3. Explain, and illustrate by examples, wherein modern English differs from the language in its earlier stages, in the use of prefixes and suffixes.

4. Explain and give the derivation of metropolitan, infinitesimal, euphonic, czar, redeemer, contraband, anthropomorphism, parthenogenesis, colophon, rhyme, materialism, romance, epic.

5. Define clearly the varying shades of the same termination in the following words: chronology, mythology, theology, geology.

ENGLISH LITERATURE.

1. In what forms and languages did the ecclesiastical and profane literature of England appear prior to the reign of Edward III.?   Name examples of each class.

2. Give a concise sketch of the authors and literary works of the reigns of Edward III. and Richard II.

3. State the era of Caxton, and give a concise account of the poets of the school of Chaucer, to the date of the introduction of the printing press.

4. Give an account of English literature of the reign of Henry VIII.; and specify minutely the characteristic differences between the writings of the poets of his reign, and those of the previous era.

5. Give an account of the successive steps in the process of development from the Miracle Play to the true Elizabethan Drama.

COMPOSITION.

"Letters, which, as ships, pass through the vast seas of time, and make distant ages participate in the wisdom, illumination, and inventions of the past."

<div style="text-align: right">BACON.</div>

Illustrate this idea concisely, writing with care, as a specimen of composition.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

HISTORY.

Examiners: { D. WILSON, LL.D.
{ J. A. BOYD, M. A.

*** *Answers to all the questions are not indispensable; but* FULL ANSWERS *are required to as many as can be overtaken within the time.*

I. Outlines of Ancient History.

(1.) What led to the Hegemony of Sparta over the rest of Hellas, and what consequences resulted from this Hegemony?

(2.) Give some account of the battle of Marathon, and estimate its importance.

(3.) Mention the circumstances connected with the establishment and the abolition of the Decemvirates.

(4.) Give the character and chief incidents of Vespasian's reign.

(5.) What chief points of distinction existed between the Germanic conquests of Roman provinces on the continent and the Saxon invasion of England.

II. British history to Henry VIII.

(1.) Give a summary of the advantages derived by England from the Norman conquest.

(2.) Write brief notes upon the lives and influence of Wickliffe, Thomas à Becket, and Archbishop Langton.

(3.) "With the reign of Stephen," says Hamilton, "closes the period which may be emphatically styled the era of the conquest."

    (*a*) State the reasons from which this conclusion is drawn.

    (*b*) Trace the lines of descent of the immediate successor of Stephen.

(4.) Relate the circumstances connected with the conquest of Wales.

(5.) What causes contributed to the extension of royal prerogative during the reign of Henry VIII ?
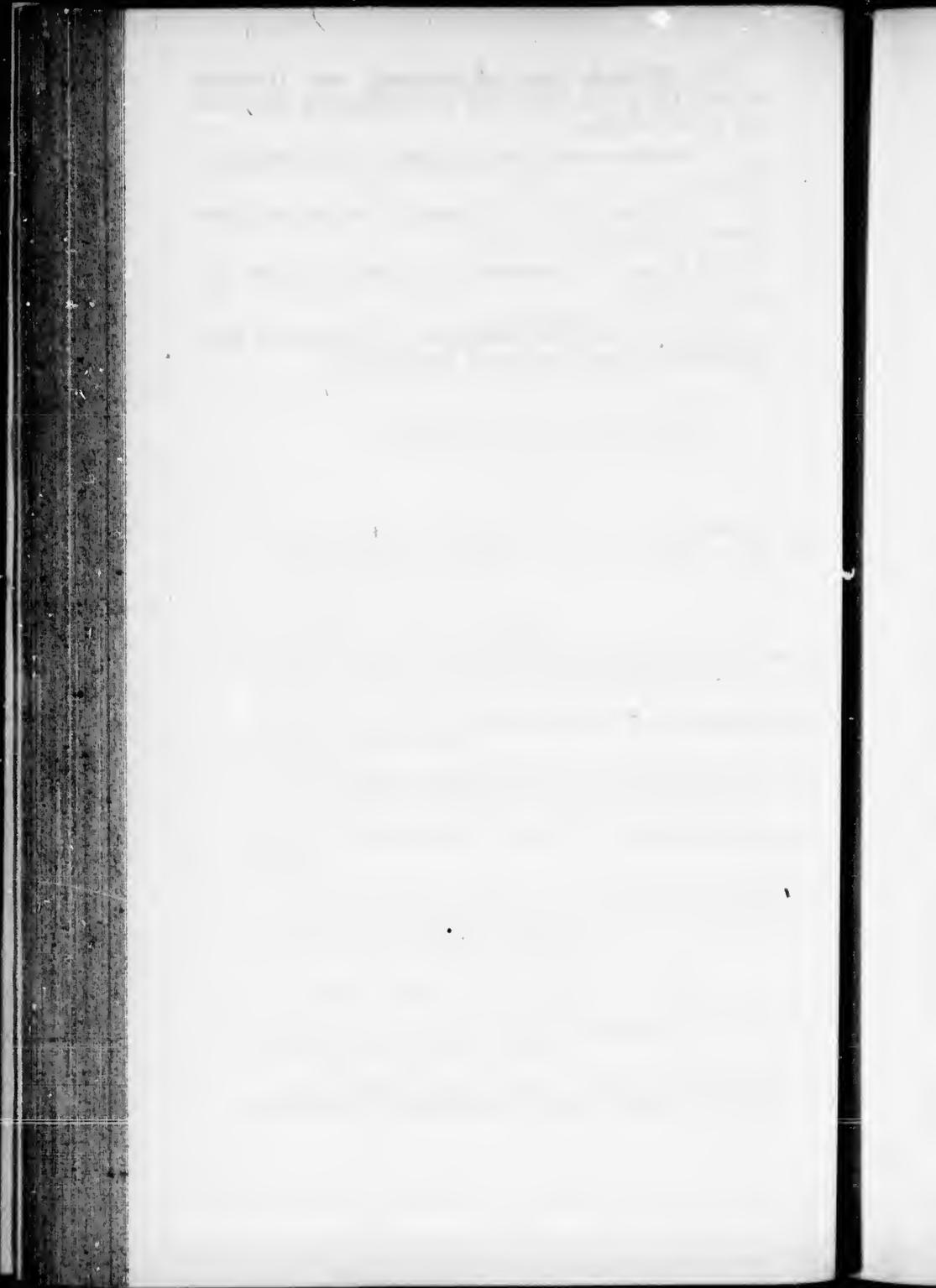
University of Toronto.

FIRST YEAR.

ENGLISH.

HONORS AND SCHOLARSHIPS.

Examiners: { D. Wilson, LL.D.
J. A. Boyd, M.A.

I. *Prosody.*

(1.) Give an example of "Service metre," and of "Gay's stanza." Name the measures which we have borrowed from Italy, and characterize each.

(2.) Give an account of the introduction and naturalization of Hexameters as an English measure.

(3.) Analyse the following rhymes, stating which are perfect and which imperfect, with reasons:— *Away* and *sway; made* and *strayed; go* and *flow; light* and *satellite; remained* and *land; path* and *faith; hosanna* and *banner.*

(4.) Discuss the advantages or disadvantages which have accrued to English prosody, owing to the various verbal and inflexional changes of the language which have taken place since the time of Chaucer.

(5.) Sketch the history of the English sonnet.

II. *History of the English language.*

(1.) Shew, by a table, the relationship which exists between English and other languages (ancient and modern) of the Teutonic Stock.

(2.) Specify some of the chief peculiarities of Chaucer's English.

(3.) Classify the various accessions to our vocabulary from the Latin, and give examples of each class.

(4.) Latham says: "The determination of the amount of Danish in English is difficult......A few years back the current opinion was against the doctrine that there was much Danish in England. At present, the tendency is rather the other way."

Shew wherein consists the difficulty, and give reasons in support of the more modern opinion.

(5.) Compare and contrast English prose as exhibited in the following authors: Hooker, Addison, Swift, Johnson, Lander and Trench.

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University of Toronto.

FIRST YEAR.

HISTORY.

HONORS AND SCHOLARSHIPS.

Examiners: { D. Wilson, LL.D.
J. A. Boyd, M.A.

**Answers to all the questions are not indispensable; but FULL ANSWERS *are required to as many as can be over-taken within the time.*

1. Describe the character of Pope Nicholas V., and the course pursued by him in relation to Turkish aggression.

2. Trace to their sources the claims of the houses of Anjou and Aragon on the kingdoms of Sicily and Naples; and give a sketch of the proceedings of Charles VIII. of France in asserting his Italian claims.

3. Describe the character of Pope Leo X., and trace his personal influence on European History.

4. State the circumstances of the fall of Granada; and account for the successful aggression of a Mahommedan power in the east of Europe, and the fall of another in the west, within so brief an interval. Give the two dates.

5. Define the influences at work towards the close of the 15th century, which led to the decline and extinction of the commercial republics of Italy.

6. Trace the genealogical relations of Henry VIII. to Edward III., and assign the causes which rendered England indifferent to the fall of Constantinople.

7. Specify the prominent historical events connected with France and Germany at the commencement of the 16th century.

8. Describe the characters of Cardinals Xavier and Adrian; and assign to each his share in the development of the character and the fortunes of Charles V.

9. Compare Constantine XI. of the Eastern Empire, and Boabdil of Granada, in personal character, conduct, and influence on the events which closed the career of each.

10. Describe the personal character of Henry VII.; and trace his influence on English domestic and foreign policy, and on maritime enterprise.

11. What peculiar circumstances tended to keep alive the crusading spirit in Spain down to the 15th century, when it had died out elsewhere throughout Christendom?

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

FRENCH.
HONORS AND SCHOLARSHIPS.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.
Translate into French:

Fear seizes man in his cradle and accompanies him to his grave. Scarcely is he born, when he fears his nurse. As a child he fears him who brings him up. In his youth he fears his superiors; in his manhood he fears a multitude of evils, the reverses of fortune and the loss of all that is dear to him, sickness, shame, death; if he is good he fears the wicked; if he is bad the laws. Lastly, in his old age he trembles at eternity.

II.
Translate into English:

Ah? qu'était-il sans toi? qu'ai-je aimé que toi même?
Et qu'est-ce auprès de toi que ce vil univers?
Mon âme va te suivre au fond de tes déserts.
Je vais seule en ces lieux, où l' horreur me consume,
Languir dans les regrets, sécher dans l'àmertume,
Mourir dans le remords d'avoir trahi ma foi,
D'être au pouvoir d'un autre, et de brûler pour toi.
Pars, emporte avec toi mon bonheur et ma vie;
Laisse-moi les horreurs du devoir qui me lie.
J'ai mon amant ensemble et ma gloire à sauver.
Tous deux me sont sacrés; je les veux conserver.

VOLTAIRE, *Alzire,* Act iv., Scene v.

1. *Qu'était-il, sans toi?*   What does *il* refer to?

2. *Qu'ai-je aimé que, &c.*   Fill up the ellipsis.

3. *Et qu'est-ce, &c.*   Destroy the pleonasm in this line.

4. *Auprès de toi.*   Give the true force of *auprès* here.

5. *Où l' horreur me consume, &c.*   Where?   Explain.

6. *D'avoir trahi ma foi.*   To whom? and how?

7. *D'être au pouvoir d'un autre, et de brûler pour toi.* Explain this line.

8. *Du devoir qui me lie.*   What duty?

9. *J'ai mon amant.   Et ma gloire à sauver.*   How?

III.

Translate into English :

Capitaine renard allait de compagnie
Avec son ami bouc des plus haut encornés :
Celui-ci ne voyait pas plus loin que son nez :
L'autre était passé maître en fait de tromperie.
La soif les obligea de descendre en un puits :
  Là chacun d'eux se désaltère.
Après qu'abondamment tous deux en eurent pris,
Le renard dit au bouc : Que ferons-nous, compère ?
Ce n'est pas tout de boire, il faut sortir d'ici.
Lève tes pieds en haut, et tes cornes aussi ;
Mets-les contre le mur : le long de ton échine
  Je grimperai premièrement ;
  Puis, sur tes cornes m'élevant,
  A l'aide de cette machine,
  De ce lieu-ci je sortirai,
  Après quoi je t'en tirerai.
Par ma barbe, dit l'autre, il est bon ; et je loue
  Les gens bien sensés comme toi.
  Je n'aurais jamais, quant à moi,
  Trouvé ce secret, je l'avoue.
Le renard sort du puits, laisse son compagnon,
  Et vous lui fait un beau sermon
  Pour l'exhorter à patience.
Si le Ciel t'eût, dit-il, donné par excellence
Autant de jugement que de barbe au menton,
  Tu n'aurais pas, à la légère,
Descendu dans ce puits. Or, adieu ; j'en suis hors :

Tâche de t'en tirer, et fais tous tes efforts ;
　　　　Car pour moi j'ai certaine affaire
Qui ne me permet pas d'arrèter en chemin.

En toute chose il faut considérer la fin.

<div align="right">

LaFontaine, Livre iii., Fable v.

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1. *Des plus haut encornés.* Form a relative sentence, and state what part of speech is *plus haut ?*

2. *Plus loin que son nez.* Give the force.

3. *Tous deux en eurent pris.* What does *en* refer to ?

4. *Il faut sortir d'ici.* Resolve *sortir* by a conjunction, tense, and mood.

5. *Après quoi.* Suppress *quoi* and give the equivalent.

6. *Je t'en tirerai.* What does *t'en* refer to ?

7. *Par ma barbe.* What does this expression mean, or what part of the speech ?

8. *Il est bon.* Suppress *il* and give the equivalent.

9. *Les gens bien sensés comme toi.* Form a comparative of equality.

10. *Ce secret.* Give the force.

11. *Et vous lui fait un beau sermon.* What is *vous ?*

12. *Que de barbe au menton.* Fill up the ellipsis.

13. *Á la légère.* Give the force.

14. *Tâche de t'en tirer.* Suppress *en* and give the equivalent.

15. *Fais tous tes efforts.* Add the complement.

16. *Qui ne me permet, &c.* Suppress *me*, turn *arreter* into a reflective verb, and resolve it by a conjunction, tense, and mood.

17. *Il faut considérer la fin.* Make it definite.

University of Toronto.

FIRST YEAR.

FRENCH.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.

Translate :

Tous les gens qui avaient eu des projets ambitieux avaient travaillé à mettre une espèce d'anarchie dans la république. Pompée, Crassus et César y réussirent à merveille. Ils établirent une impunité de tous les crimes publics; tout ce qui pouvait arrêter la corruption des mœurs, tout ce qui pouvait faire une bonne police, ils l'abolirent; et comme les bons législateurs cherchent à rendre leurs concitoyens meilleurs, ceux-ci travaillaient à les rendre pires : ils introduisirent donc la coutume de corrompre le peuple à prix d'argent, et quand on était accusé de brigues on corrompait aussi les juges; ils firent troubler les élections par toutes sortes de violences, et quand on était mis en justice on intimidait encore les juges; l'autorité même du peuple était anéantie : témoin Gabinius, qui, après avoir rétabli, malgré le peuple, Ptolomée à main armée vint froidement demander le triomphe.

Grandeur et Décadence des Romains.

1. *Tous les gens.* Give the various constructions of *gens*.

2. *Y réussirent.* Suppress *y*, and give the equivalent.

3. *Ils l'abolirent.* Give the antecedents of *ils* and *l'*. What figure do you perceive in *l'?* Suppress it, and re-arrange the sentence in regular order.

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University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

FRENCH.

Examiners: { JAMES FORNERI, LL.D.
ROBERT SULLIVAN, M.A.

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1. *Tous les gens.* Give the various constructions of *gens*.

2. *Y réussirent.* Suppress *y*, and give the equivalent.

3. *Ils l'abolirent.* Give the antecedents of *ils* and *l'*. What figure do you perceive in *l'* ? Suppress it, and re-arrange the sentence in regular order.

4. *Ceux-ci travaillaient.* What does *ceux-ci* refer to?

5. *Travaillaient.* Why the imperfect?

6. *Ils introduisirent.* Why the preterite definite?

7. *Quand on était.* What sort of pronoun is *on*. From what is it derived? Give its peculiarities.

8. *L'autorité même.* What part of speech is *même*.

9. *Après avoir rétabli.* Resolve by tense and mood.

10. Give the primitive tenses of *réussir, pouvoir, corrompre,* and *venir.*

II.

GRAMMATICAL QUESTIONS.

1. Before what countries is the definite article omitted?

2. Name some substantives which are masculine in one signification, and feminine in another.

3. When do proper names of persons take the mark of the plural and when not?

4. Mention some of the compound substantives, and state how they form the plural.

5. When is an adjective placed after two or more substantives, to agree with the last only, and when only with the first?

6. When do   adjective or participle past take *en* before?

7. What case or what mood does a superlative relative govern in French?

8. With what verbs are disjunctive pronouns, or pronouns preceded by a preposition, used?

9. Name some collective general, and some partitive, and explain their respective agreement with the verb.

10. State three cases in which the suppression of *pas* and *point* is obligatory.

11. Can an adjective or cardinal number be an antecedent to a relative pronoun? Correct, if faulty, the following sentences:

> *Nous étions deux, qui étaient du même avis; vous parlez comme un homme qui entendez la matière.*

4. *Ceux-ci travaillaient.* What does *ceux-ci* refer to ?

5. *Travaillaient.* Why the imperfect ?

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University of Toronto.

FIRST YEAR.

ELEMENTARY CHEMISTRY.

Examiner: HENRY CROFT, D.C.L.

1. What changes accompany chemical action?

2. Explain the nomenclature of the oxides.

3. What is a neutral salt? Give instances. What is an acid salt? Give instances.

4. What are the oxy-acids and hydracids? Give the general formulas of their salts.

5. Describe the preparation and properties of oxygen.

6. In what forms may carbon occur?

7. Give the general properties of the metals.

8. Give the methods of forming metallic oxides.

9. What metals are not acted on by nitric acid?

10. Calculate the equivalent of bisulphate of potassa: $K=39$ $S=16$ $O=8$.

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University of Toronto.

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University of Toronto.

ANNUAL EXAMINATIONS: 1864.

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University of Toronto.

FIRST YEAR.

ELEMENTARY CHEMISTRY.
HONORS AND SCHOLARSHIPS.

Examiner: HENRY CROFT, D.C.L.

1. What is meant by single and double elective affinity? Give instances.

2. What circumstances favour chemical action?

3. Give the laws of combination.

4. Show by formulas the different modes of preparing oxygen.

5. Give the preparation and properties of hydrosulphuric acid. How does it act on metallic oxides?

6. Give the preparation and properties of sulphurous acid. What is its action on vegetable colours?

7. Give the sources and properties of boracic acid.

8. Give the preparation and properties of potassium.

9. How does carbonate of lime occur in nature?

10. Mention the principal minerals in which alumina is found.

11. Give the ores and oxides of lead.

12. Give the ores and oxides of tin. How are the latter prepared?

University of Toronto.

FIRST YEAR.

ELEMENTARY NATURAL HISTORY.
HONORS AND SCHOLARSHIPS.

Examiners: { REV. PROF. HINCKS, F.L.S.
{ T. J. COTTLE, ESQ.

1. Sketch of vegetable anatomy, an account of the elementary parts of plants, with their principal variations.

2. Food of plants, with the means of obtaining it.

3. When a plant is removed from one place to another, what are the causes of danger, and what are the precautions proper to be employed?

4. General structure of Lamellibranchiate Mollusks— points of chief importance as affording useful discriminating characters. The five orders, with the families under each.

5. Proboscidean Gasteropods: the families, with their distinguishing characters.

6. Analysis of Raptorial birds, distinguishing the families and sub-families, with the habits peculiar to each.

7. Family Magapodidæ : their relations with other birds, and their peculiar habits, especially in respect to the production of their young.

8. Families of Grallatorial birds, with the sub-families of the Rallidæ, and their distinguishing habits.

9. What are the characters which have caused the family Columbidæ to be placed among Rasores? What are the objections to this view?

10. Insessores: the sub-orders with the families of Firsirostres, and particulars of their mode of life.

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University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST AND SECOND YEARS.

ELEMENTARY NATURAL HISTORY.

Examiners: { Rev. Prof. Hincks, F.L.S.
{ T. J. Cottle, Esq.

1. Give examples of consolidated forms of vegetation. How are the leaves represented homologically and functionally? To what kind of climate are such plants adapted?

2. Describe some anomalous forms of leaves, or appendages to leaves.

3. When the outer flowers of a cyme or umbel are enlarged and barren, what is the explanation? Give some examples.

4. What is meant by æstivation? Name the principal varieties.

5. Explain the differences in nature between appendages to the seed for its conveyance through the air, and similar appendages to the fruit. Give examples of the several kinds.

6. What is the primary element of animal tissues? and what are the chief varieties under which they appear?

7. What is the difference of structure between the voluntary and involuntary muscles? Give examples of each.

8. Of what different parts does blood consist? Explain the nature of the blood disks, and their different size in different animals.

9. What peculiarities in the embryonic condition of osseous fishes are found in the perfect condition of another group of fishes, and what conclusions have been drawn from these facts?

10. Metamorphosis of animals: give examples from several parts of the animal kingdom.

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University of Toronto.

FIRST YEAR.

METAPHYSICS AND ETHICS.

Examiner: REV. JAMES BEAVEN, D.D.

PALEY'S NATURAL THEOLOGY.

1. *a.* What illustration does Paley employ to shew the sense in which rational creatures are the causes of the existence of their offspring?

   b. In what respect are they not adequate causes, and what inference do we draw from this fact?

2. *a.* Describe the position and effect of the *sartorius muscle.*

   b. How does this bear on the general argument it is intended to illustrate?

3. *a.* To meet what objection does Buffon bring forward his hypothesis of "internal moulds? and how does he employ it?

   b. What objection to this hypothesis?

4. *a.* Illustrate the relations of air to light.

   b. What is the object of tracing those relations?

5. *a.* Why was it important that in the case of the earth the axis of rotation should be fixed?

   b. Shew that it is fixed in the best manner, and point out the bearing of this fact upon the general argument.

6. "If you had occasion to describe instruments of torture, 'This engine,' you would say, 'is to extend the sinews, this to dislocate the joints, &c.'"

Explain the object of this illustration, with the connexion in which it stands.

PALEY'S EVIDENCES.

1.   *a.* How does the nature of the case afford a strong proof that the original teachers of Christianity must have entered upon a new course of life?

    b. Show from their own and other writers that they actually did so?

2.   *a.* What is the difference between genuineness and authenticity?

    b. Of what Christian writings does Paley think it necessary to prove both the genuineness and authenticity, and with what object?

    c. Give the several heads of proof, classing them respectively under genuineness and authenticity.

3. "It has been said that, if the prodigies of Jewish history had been found only in fragments of Manetho or Berosus, we should have paid no regard to them."

Does Paley admit this? What distinction does he draw between such a case and the case as it actually is? and what point is this to illustrate?

4. How may the learning and labours of the early Christian writers be shown? and what inference is drawn from the facts?

5.   *a.* Give any particulars of the testimony of heathen writers to the rapid spread of the gospel.

    b. Exhibit the rate of the progress of Mahometanism, both directly and as compared with Christianity.

6. Shew that Christianity is not justly chargeable with the persecuting laws which have been made in its support.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

GREEK.

Examiners: { REV. JOHN McCAUL, LL.D.
Thomas Moss, M.A.

I.

Translate :

Ἡ μέν μιν νύμφην γε νέην κατελείπομεν ἡμεῖς
Ἐρχόμενοι πόλεμόνδε· πάϊς δέ οἱ ἦν ἐπὶ μαζῷ
Νήπιος, ὅς που νῦν γε μετ' ἀνδρῶν ἵζει ἀριθμῷ,
Ὄλβιος· ἦ γὰρ τόν γε πατὴρ φίλος ὄψεται ἐλθών,
Καὶ κεῖνος πατέρα προσπτύξεται, ἣ θέμις ἐστίν.
Ἡ δ' ἐμὴ οὐδέ περ υἷος ἐνιπλησθῆναι ἄκοιτις
Ὀφθαλμοῖσιν ἔασε· πάρος δέ με πέφνε καὶ αὐτόν.
[Ἄλλο δέ τοι ἐρέω, σὺ δ' ἐνὶ φρεσὶ βάλλεο σῆσιν.
Κρύβδην, μηδ' ἀναφανδὰ, φίλην ἐς πατρίδα γαῖαν
Νῆα κατισχέμεναι, ἐπεὶ οὐκέτι πιστὰ γυναιξίν.]
Ἀλλ' ἄγε μοι τόδε εἰπὲ καὶ ἀτρεκέως κατάλεξον,
Εἴ που ἔτι ξώοντος ἀκούετε παιδὸς ἐμοῖο,
Ἤ που ἐν Ὀρχομενῷ ἢ ἐν Πύλῳ ἠμαθόεντι
Ἤ που πὰρ Μενελάῳ ἐνὶ Σπάρτῃ εὐρείη·
Οὐ γάρ πω τέθνηκεν ἐπὶ χθονὶ δῖος Ὀρέστης.'
''Ὡς ἔφατ', αὐτὰρ ἐγώ μιν ἀμειβόμενος προσέειπον·
'Ἀτρείδη, τί με ταῦτα διείρεαι; οὐδέ τι οἶδα,
Ζώει ὅ γ' ἢ τέθνηκε· κακὸν δ' ἀνεμώλια βάζειν.'
''Νῶϊ μὲν ὣς ἐπέεσσιν ἀμειβομένω στυγεροῖσιν
Ἕσταμεν ἀχνύμενοι, θαλερὸν κατὰ δάκρυ χέοντες·
Ἦλθε δ' ἐπὶ ψυχὴ Πηληϊάδεω Ἀχιλῆος
Καὶ Πατροκλῆος καὶ ἀμύμονος Ἀντιλόχοιο
Αἴαντός θ', ὃς ἄριστος ἔην εἶδός τε δέμας τε
Τῶν ἄλλων Δαναῶν μετ' ἀμύμονα Πηλείωνα.
Ἔγνω θὲ ψυχή με ποδώκεος Αἰακίδαο,
Καί ρ' ὀλοφυρομένη ἔπεα πτερόεντα προσηύδα.

HOMER, *Odyssey*, B. XI., vv. 447–472.

1. κατισχεμέναι. Account for the use of the infinitive as an imperative.

2. πιστά. What distinction in meaning between verbals in τος and τεος?

3. εἴ πού......ἀκούετε. Give the force of πον, and its Latin equivalent.

4. Ὀρχομενῷ, Πύλῳ. Write notes upon these words.

5. Αὐτάρ. What other form does Homer use?

6. Αἴαντος. What two persons of this name in Homer?

7. τῶν ἄλλων Δαναῶν. Notice any peculiarity. Quote English parallels.

8. Give the derivations of νήπιος, ἄκοιτις, ἀναφανδά, ἀτρεκέως, ἠμαθόεντι, ἀμύμων, ποδώκευς.

9. Parse ὄψεται, υἱος, πέφνε, τέθνηκε, ἕσταμεν, ἔγνω, πτερόεντα.

II.

1. Explain the terms διασκευασταί, χωρίζοντες, and ὀβελίζειν.

2. Who is said to have collected the Homeric poems?

3. What is meant by saying that the Homeric form of a word is dialectic for the ordinary form?

4. What is the Digamma? Who first discovered its use in the explanation of the Homeric metre? Give instances of its occurrence in the middle of a word.

5. What reasons are there for believing Homer to have been an Asiatic Greek?

III.

Translate :

Τὰ μὲν δὴ τότε πραχθέντα οὐκ ἂν ἄλλως ἔχοι· νῦν δ' ἑτέρου πολέμου καιρὸς ἥκει τις, δι' ὃν καὶ περὶ τούτων ἐμνήσθην, ἵνα μὴ ταὐτὰ πάθητε. τί δὴ χρησόμεθα, ὦ ἄνδρες Ἀθηναῖοι, τούτῳ; εἰ γὰρ μὴ βοηθήσετε παντὶ σθένει κατὰ τὸ δυνατόν, θεάσασθε ὃν τρόπον ὑμεῖς ἐστρατηγηκότες πάντα ἔσεσθε ὑπὲρ Φιλίππου. ὑπῆρχον Ὀλύνθιοι δύναμίν τινα κεκτημένοι, καὶ διέκειθ' οὕτω τὰ πράγματα· οὔτε Φίλιππος ἐθάῤῥει τούτους οὔθ' οὗτοι

Φίλιππον. ἐπράξαμεν ἡμεῖς κἀκεῖνοι πρὸς ἡμᾶς εἰρήνην. ἦν τοῦτο ὥσπερ ἐμπόδισμά τι τῷ Φιλίππῳ καὶ δυσχερές, πόλιν μεγάλην ἐφορμεῖν τοῖς ἑαυτοῦ καιροῖς διηλλαγμένην πρὸς ἡμᾶς. ἐκπολεμῆσαι δεῖν ᾠόμεθα τοὺς ἀνθρώπους ἐκ παντὸς τρόπου καὶ ὃ πάντες ἐθρύλουν τέως, τοῦτο πέπρακται νυνὶ ὁπωσδήποτε. τί οὖν ὑπόλοιπον, ὦ ἄνδρες Ἀθηναῖοι, πλὴν βοηθεῖν ἐρρωμένως καὶ προθύμως; ἐγὼ μὲν οὐχ ὁρῶ· χωρὶς γὰρ τῆς περιστάσης ἂν ἡμᾶς αἰσχύνης εἰ καθυφείμεθά τι τῶν πραγμάτων, οὐδὲ τὸν φόβον, ὦ ἄνδρες Ἀθηναῖοι, μικρὸν ὁρῶ τὸν τῶν μετὰ ταῦτα, ἐχόντων μὲν ὡς ἔχουσι Θηβαίων ἡμῖν, ἀπειρηκότων δὲ χρήμασι Φωκέων, μηδενὸς δ' ἐμποδὼν ὄντος Φιλίππῳ τὰ παρόντα καταστρεψαμένῳ πρὸς ταῦτα ἐπικλῖναι τὰ πράγματα.

Olynthiac, III.

1. Χρησόμεθα......τούτῳ. Supply the ellipsis.

2. ἐθάρρει. What is the difference in meaning between θαρρεῖν τινα and θαρρεῖν τινι?

3. κἀκεῖνοι. When is the iota subscribed where καὶ is thus united with another word?

4. καὶ δυσχερές. Explain the construction.

5. ἐφορμεῖν. Give the full force.

6. ἐθρύλουν, What other form of this word?

7. καθυφείμεθα. Parse.

8. ἐπικλῖναι. What is understood?

9. τῆς περιστάσης ἂν. How is ἂν used with a participle?

IV.

1. Describe the geographical position of Olynthus. How did Philip finally succeed in capturing it?

2. What were the principal sources of the Athenian revenue?

3. What is meant by the trierarchy?

4. Who was the real founder of the Athenian democracy?

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LATIN.

Examiners: { REV. JOHN MCCAUL, LL.D.
Thomas Moss, M.A.

I.

Translate:

Templa Deorum immortalium, tecta urbis, vitam omnium civium, Italiam denique totam, ad exitium et vastitatem vocas. Quare, quoniam id, quod primum, atque hujus imperii disciplinæque majorum proprium est, facere nondum audeo; faciam id, quod est ad severitatem lenius, ad communem salutem utilius. Nam si te interfici jussero, residebit in republica reliqua conjuratorum manus: sin tu (quod te jamdudum hortor) exieris, exhaurietur ex urbe tuorum comitum magna et perniciosa sentina reipublicæ. Quid est, Catilina? num dubitas id, me imperante, facere, quod jam tua sponte faciebas? Exire ex urbe consul hostem jubet. Interrogas me, num in exilium? non jubeo; sed, si me consulis, suadeo.

CICERO, *in Catilinam*, I., 5.

1. Distinguish *templum* and *delubrum, muri, mœnia* and *parietes, exilium* and *relegatio.*

2. *Quod primum.* What is meant? *Hujus imperii.* What?

3. Give a list of verbs governing two datives.

II.

Translate :

Ergo illi alienum, quia poeta fuit, post mortem etiam expetunt : nos hunc vivum, qui et voluntate et legibus noster est, repudiabimus ? præsertim cum omne olim studium, atque omne ingenium contulerit Archias ad populi Romani gloriam laudemque celebrandam ? Nam et Cimbricas res adolescens attigit, et ipsi illi C. Mario, qui durior ad hæc studia videbatur, jucundus fuit. Neque enim quisquam est tam aversus a Musis, qui non mandari versibus æternum suorum laborum facile præconium patiatur. Themistoclem illum, summum Athenis virum, dixisse aiunt, cum ex eo quæreretur, quod acroama, aut cujus vocem libentissime audiret, ejus, a quo sua virtus optime prædicaretur.

CICERO, *pro Archia*, 9.

1. On what grounds was the citizenship of Archias impugned, and on what defended ?

2. Write brief notices of C. Marius and Themistocles, introducing dates where you can.

3. Give the other degrees of comparison of *facile* and *libentissime*.

III.

Translate :

Diversæ voluntates civium fuerunt, distractæque sententiæ. Non enim consiliis solum et studiis, sed armis etiam et castris dissidebamns. Erat autem obscuritas quædam, erat certamen inter clarissimos duces : multi dubitabant, quid optimum esset ; multi, quid sibi expediret ; multi, quid deceret : nonnulli etiam, quid liceret. Perfuncta respublica est hoc misero fatalique bello : vicit is, qui non fortuna inflammaret odium suum, sed bonitate leniret ; nec qui omnes, quibus iratus esset, eosdem etiam exilio aut morte dignos judicaret. Arma ab aliis posita, ab aliis erepta sunt. Ingratus est, injustusque civis, qui armorum periculo liberatus, animum tamen retinet armatum ; ut etiam ille sit melior, qui in acie cecidit, qui in causa animum profudit. Quæ enim pertinacia quibusdam, eadem aliis constantia videri potest.

CICERO, *pro Marcello*, 10.

1. What classes of verbs govern the ablative?

2. *Inflammaret.* Why in subjunctive?

3. Give examples of nouns used only in the plural.

4. What other extant speech was delivered by Cicero in the same year with that for Marcellus?

IV.

Translate :

> SEPTIMI, Gades aditure mecum et
> Cantabrum indoctum juga ferre nostra et
> Barbaras Syrtes, ubi Maura semper
>   Æstuat unda ;
> Tibur Argeo positum colono
> Sit meæ sedes utinam senectæ,
> Sit modus lasso maris et viarum
>   Militiæque !
> Unde si Parcæ prohibent iniquæ,
> Dulce pellitis ovibus Galæsi
> Flumen et regnata petam Laconi
>   Rura Phalanto.

HORACE, *Odes*, II., 6.

1. Give scales of the metres.

2. What is the construction of *maris* and of *ovibus?*

3. Write explanatory notes on *Cantabrum* to *nostra,* *Tibur* to *colono,* and *regnata* to *Phalanto.*

V.

Translate :

> Delicta majorum immeritus lues,
> Romane, donec templa refeceris
>   Ædesque labentes Deorum et
>   Fœda nigro simulacra fumo.
> Dis te minorem quod geris, imperas :
> Hinc omne principium, huc refer exitum.
>   Di multa neglecti dederunt
>   Hesperiæ mala luctuosæ.
> Jam bis Monæses et Pacori manus
> Non auspicatos contudit impetus
>   Nostros et adjecisse prædam
>   Torquibus exiguis renidet.

HORACE, *Odes*, III., 6.

1. Give scales of the metres.

2. Write explanatory notes on *Jam bis* to *nostros*, and *Torquibus exiguis.*

3. Give scales of the Epichoriambics found in the odes.

VI.

Translate:

> Ne forte credas interitura quæ
> Longe sonantem natus ad Aufidum
> Non ante vulgatas per artes
>   Verba loquor socianda chordis :
> Non, si priores Mæonius tenet
> Sedes Homerus, Pindaricæ latent
> Cææque et Alcæi minaces
>   Stesichorique graves Camenæ.

<div align="right">HORACE, Odes, IV., 9.</div>

1. Explain *natus ad Aufidum, Mæonius,* and *Ceæ.*

2. What were the birth-places of *Pindar, Alcæus,* and *Stesichorus ?*

3. Give examples of Græcisms used by Horace.

4. What were the circumstances of Horace's introduction to Mæcenas ? and what the probable date ?

University of Toronto.

SECOND YEAR.

GREEK.
HONORS AND SCHOLARSHIPS.

Examiners : { Rev. John McCaul, LL.D.
Thomas Moss, M.A.

I.

Translate :

Ὅτι δ' οὕτω ταῦτ' ἔχει, τὰ μὲν νῦν ὁρᾶτε δήπου καὶ οὐδὲν ἐμοῦ προσδεῖσθε μάρτυρος· τὰ δ' ἐν τοῖς ἄνωθεν χρόνοις ὅτι τἀναντία εἶχεν ἐγὼ δηλώσω, οὐ λόγους ἐμαυτοῦ λέγων, ἀλλὰ γράμματα τῶν προγόνων τῶν ὑμετέρων δεικνύων, ἁκεῖνοι κατέθεντο εἰς στήλην χαλκῆν γράψαντες εἰς ἀκρόπολιν, οὐχ ἵνα αὐτοῖς ᾖ χρήσιμα (καὶ γὰρ ἄνευ τούτων τῶν γραμμάτων τὰ δέοντα ἐφρόνουν,) ἀλλ' ἵν' ὑμεῖς ἔχητε ὑπομνήματα καὶ παραδείγματα ὡς ὑπὲρ τῶν τοιούτων σπουδάζειν προσήκει. τί οὖν λέγει τὰ γράμματα; "Ἄρθμιος" φησὶ "Πυθώνακτος Ζελείτης ἄτιμος ἔστω καὶ πολέμιος τοῦ δήμου τοῦ Ἀθηναίων καὶ τῶν συμμάχων αὐτὸς καὶ γένος." εἶθ' ἡ αἰτία γέγραπται, δι' ἣν τοῦτ' ἐγένετο· ὅτι τὸν χρυσὸν τὸν ἐκ Μήδων εἰς Πελοπόννησον ἤγαγεν. ταῦτ' ἐστὶ τὰ γράμματα. λογίζεσθε δὴ πρὸς θεῶν καὶ θεωρεῖτε παρ' ὑμῖν αὐτοῖς τίς ἦν ποθ' ἡ διάνοια τῶν τότε Ἀθηναίων τῶν ταῦτα ποιούντων, ἢ τί τὸ ἀξίωμα. ἐκεῖνοι Ζελείτην τινὰ Ἄρθμιον δοῦλον βασιλέως (ἡ γὰρ Ζέλειά ἐστι τῆς Ἀσίας,) ὅτι τῷ δεσπότῃ διακονῶν χρυσίον ἤγαγεν εἰς Πελοπόννησον, οὐκ Ἀθήναζε, ἐχθρὸν αὐτῶν ἀνέγραψαν καὶ τῶν συμμάχων αὐτὸν

καὶ γένος, καὶ ἀτίμους. τοῦτο δ᾽ ἐστὶν οὐχ ἣν οὑτωσί τις
ἂν φήσειεν ἀτιμίαν· τί γὰρ τῷ Ζελείτῃ, τῶν Ἀθηναίων
κοινῶν εἰ μὴ μεθέξειν ἔμελλεν ; ἀλλ᾽ οὐ τοῦτο λέγει, ἀλλ᾽
ἐν τοῖς φονικοῖς γέγραπται νόμοις, ὑπὲρ ὧν ἂν μὴ διδῷ
φόνου δικάσασθαι, ἀλλ᾽ εὐαγὲς ᾖ τὸ ἀποκτεῖναι, "καὶ
ἄτιμος" φησὶ "τεθνάτω." τοῦτο δὴ λέγει, καθαρὸν τὸν
τούτων τινὰ ἀποκτείναντα εἶναι. οὐκοῦν ἐνόμιζον ἐκεῖνοι
τῆς πάντων τῶν Ἑλλήνων σωτηρίας αὐτοῖς ἐπιμελητέον
εἶναι. οὐ γὰρ ἂν αὐτοῖς ἔμελεν εἴ τις ἐν Πελοποννήσῳ
τινὰς ὠνεῖται καὶ διαφθείρει, μὴ τοῦθ᾽ ὑπολαμβάνουσιν·
ἐκόλαζον δ᾽ οὕτω καὶ ἐτιμωροῦντο οὓς αἴσθοιντο ὥστε καὶ
στηλίτας ποιεῖν.

<div align="right">PHILLIPIC, III.</div>

1. δήπου. Give the full force and Latin equivalent.

2. Translate : σπουδάζειν πρός τινα and σπουδάζειν περί
τινα.

3. Ζελείτης. Where was Zelea ?

4. ἄτιμος. How many kinds of ἀτιμία at Athens?
Mention the consequences of each kind. What is meant by
καθάπαξ ἄτιμος ?

5. Πελοπόννησον. Name the principal states of the
Peloponnesus in the time of Demosthenes.

6. Ἄρθμιος Πυθώνακτος. What is the ordinary idiom ?

7. χρυσίον. Give a list of the principal terminations of
diminutives. What is the rule for the accentuation of
diminutives in ιον ?

8. φονικοῖς νόμοις. What was necessary to entitle a per-
son who had committed involuntary homicide to a restitution
of his civil rights ?

9. Explain and illustrate the most common usages of
the middle voice.

10. Under what circumstances was the third Philippic
pronounced ? What extant speech does it follow chrono-
logically ?

11. Give the geographical positions of Σέρρειον, Δορίσκος,
Ἱερὸν ὄρος, Ἀμβρακία, Πορθμός, and Ναύπακτος ; and men-
tion important historical events connected with any of them.

Translate :

XO. ὦ πολύξεινος καὶ ἐλεύθερος ἀνδρὸς ἀεί ποτ᾽ οἶκος.
    σέ τοι καὶ ὁ Πύθιος εὐλύρας Ἀπόλλων
    ἠξίωσε ναίειν,
    ἔτλα δὲ σοῖσι μηλονόμας
    ἐν δόμοις γενέσθαι,
    δοχμιᾶν διὰ κλιτύων
    βοσκήμασι σοῖσι συρίζων
    ποιμνίτας ὑμεναίους.
    σὺν δ᾽ ἐποιμαίνοντο χαρᾷ μελέων βαλιαί τε λύγκες
    ἔβα δὲ λιποῦσ᾽ Ὄθρυος νάπαν λεόντων
    ἁ δαφοινὸς ἴλα·
    χόρευσε δ᾽ ἀμφὶ σὰν κιθάραν,
    Φοῖβε, ποικιλόθριξ
    νεβρὸς ὑψικόμων πέραν
    βαίνουσ᾽ ἐλατᾶν σφυρῷ κούφῳ,
    χαίρουσ᾽ εὔφρονι μολπᾷ.
    τοιγὰρ πολυμηλοτάταν
    ἑστίαν οἰκεῖ παρὰ καλλίναον
    Βοιβίαν λίμναν· ἀρότοις δὲ γυᾶν
    καὶ πεδίων δαπέδοις ὅρον ἀμφὶ μὲν ἀελίου κνεφαίαν
    ἱππόστασιν αἰθέρα τὰν Μολοσσῶν τίθεται,
    πόντιον δ᾽ Αἰγαίων᾽ ἐπ᾽ ἀκτὰν
    ἀλίμενον Πηλίου κρατύνει.
    καὶ νῦν δόμον ἀμπετάσας
    δέξετο ξεῖνον νοτερῷ βλεφάρῳ,
    τᾶς φίλας κλαίων ἀλόχου νέκυν ἐν
    δώμασιν ἀρτιθανῆ· τὸ γὰρ εὐγενὲς ἐκφέρεται πρὸς αἰδῶ.
    ἐν τοῖς ἀγαθοῖσι δὲ πάντ᾽ ἔνεστιν σοφίας.
    πρὸς δ᾽ ἐμᾷ ψυχᾷ θάρσος ἧσται
    θεοσεβῆ φῶτα κεδνὰ πράξειν.

EURIPIDES, *Alcestis*, vv. 568-605.

1. πολύξεινος καὶ ἐλεύθερος. On what principle do these adjectives agree with οἶκος instead of ἀνδρός?

2. χόρευσε. When do the tragedians allow the omission of the augment?

3. πέραν. Distinguish between πέραν and πέρα.

4. αἰθέρα. What peculiarity in the gender of this word?

5. Derive μηλονόμας, ποιμνίτας, βάλιος, ποικιλόθριξ, πολύμηλος, ἀλίμενον, ἀκτάν, κεδνός·

6. Parse δοχμιᾶν, μελέων, ἀμπετάσας, δέξετο, ἧσται.

7. Accentuate the following words according to their different significations : ὅρος, φῶς, ἀλλα, οἰκοι, κει ος, συν.

8. Scan and give the metrical names of the first six lines of the extract.

III.

Translate and give different readings of :

(a)   οὐ μὴν ἐρεῖς γέ μ᾽ ὡς ἀτιμάζων τὸ
γῆρας θανεῖν προὔδωκά σ᾽, ὅστις αἰδόφρων
πρός σ᾽ ἦν μάλιστα, κἀντὶ τῶνδέ μοι χάριν
τοιάνδε καὶ σὺ χἠ τεκοῦσ᾽ ἠλλαξάτην.

(b) XO· ἐγὼ μὲν οὐκ ἔχοιμ᾽ ἂν εὖ λέγειν τύχην·
χρὴ δ᾽, ὅστις εἶσι, καρτερεῖν θεοῦ δόσιν.

   HP· εἰ γὰρ τοσαύτην δύναμιν εἶχον ὥστε σὴν
ἐς φῶς πορεῦσαι νερτέρων ἐκ δωμάτων
γυναῖκα, καὶ σοι τήνδε πορσῦναι χάριν.

IV.

1. How is the partially comic character of this drama accounted for ?

2. What religious meaning is supposed to be involved in this legend ?

3. What restriction upon the use of the Iambic syzygy in choriambics ?

4. When is a verse called ἀνακλώμενος ?

5. Give instances of Ionicisms used by the tragedians.

6. Give a brief biographical sketch of the inventor of Greek tragedy.

7. Mention any extant specimen of a Greek *historical* tragedy. What other is known to have existed ?

8. Quote instances of the sophistry of Euripides.

University of Toronto.

SECOND YEAR.

LATIN.
HONORS.

Examiners: { REV. JOHN McCA   .D.
                THOMAS MOSS, M.

I.

Translate :

Ergo ipsas quamvis angusti terminus ævi
Excipiat, (neque enim plus septima ducitur æstas),
At genus immortale manet, multosque per annos
Stat fortuna domus, et avi numerantur avorum.
Præterea regem non sic Ægyptos et ingens
Lydia, nec populi Parthorum aut Medus Hydaspes
Observant.   Rege incolumi mens omnibus una est ;
Amisso, rupere fidem constructaque mella
Diripuere ipsæ, et crates solvere favorum.
Ille operum custos ; illum admirantur, et omnes
Circumstant fremitu denso, stipantque frequentes
Et sæpe attollunt humeris, et corpora bello
Objectant, pulchramque petunt per vulnera mortem.
His quidam signis atque hæc exempla secuti,
Esse apibus partem divinæ mentis et haustus
Ætherios dixere : deum namque ire per omnes
Terrasque tractusque maris cœlumque profundum ;
Hinc pecudes, armenta, viros, genus omne ferarum,
Quemque sibi tenues nascentem arcessere vitas ;
Scilicet huc reddi deinde ac resoluta referri
Omnia ; nec morti esse locum, sed viva volare
Sideris in numerum atque alto succedere cœlo.

VIRGIL, *Georgics*, iv., vv. 206-207.

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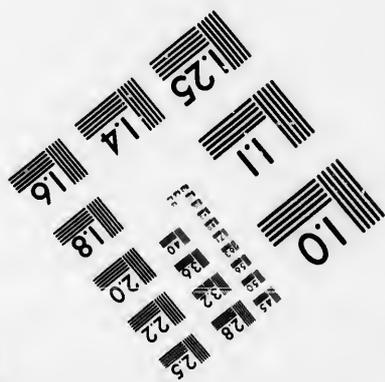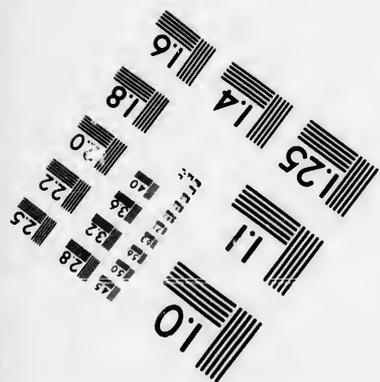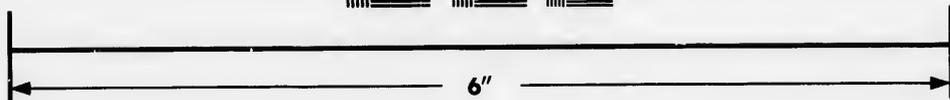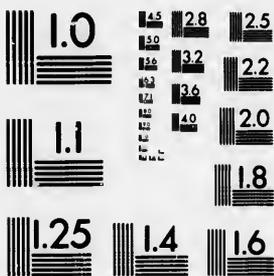
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1. When is final *is* long? When short?

2. *Plus septima æstas.* What is the construction?

3. Distinguish *mănet* and *mānet*.

4. Distinguish *avi, abavi, atavi,* and *proavi.*

5. *Ingens Lydia.* What is the meaning of the epithet?

6. *Ipsæ.* What is the force?

7. *His signis.* In what case, and why?

8. *Deum namque,* &c. What sects of philosophers held this opinion?

II.

Translate:

Etsi vereor, judices, ne turpe sit, pro fortissimo viro dicere incipientem, timere; minimeque deceat, cum T. Annius ipse magis de reipublicæ salute, quam de sua perturbetur, me ad ejus causam parem animi magnitudinem afferre non posse; tamen hæc novi judicii nova forma terret oculos; qui, quocumque inciderunt, veterem consuetudinem fori, et pristinum morem judiciorum requirunt. Non enim corona consessus vester cinctus est, ut solebat; non usitata frequentia stipati sumus. Nam illa præsidia, quæ pro templis omnibus cernitis, etsi contra vim collocata sunt, non afferunt tamen oratori aliquid; ut in foro et in judicio, quanquam præsidiis salutaribus et necessariis septi sumus, tamen ne non timere quidem sine aliquo timore possimus. Quæ si opposita Miloni putarem, cederem tempori, judices, nec inter tantam vim armorum existimarem oratori locum esse. Sed me recreat et reficit Cn. Pompeii, sapientissimi et justissimi viri, consilium: qui profecto nec justitiæ suæ putaret esse, quem reum sententiis judicum tradidisset, eundem telis militum dedere; nec sapientiæ, temeritatem concitatæ multitudinis auctoritate publica armare. Quamobrem illa arma, centuriones, cohortes, non periculum nobis, sed præsidium denunciant: neque solum, ut quieto, sed etiam ut magno animo simus, hortantur; neque auxilium modo defensioni meæ, verum etiam silentium pollicentur. Reliqua vero multitudo, quæ quidem est civium, tota nostra est: neque eorum quisquam, quos undique intuentes ex hoc ipso loco cernitis, unde aliqua pars fori adspici potest,

et hujus exitum judicii expectantes, non cum virtuti Milonis favet, tum de se, de liberis suis, de patria, de fortunis, hodierno dic decertari putat.

CICERO, *pro Milone.*

1. *Hæc novi judicii nova forma.* What is the meaning?

2. *Corona consessus.* Explain each of these terms.

3. *Tamen* to *possimus.* Give the meaning fully.

4. *Cn. Pompeii.* In what peculiar circumstances was he placed at the time?

5. *Quidem.* What is the force?

6. *Decertari.* What is the effect of *de* in composition?

7. Write a brief account of the life of Milo before the murder of Clodius.

8. Discuss the question as to the date of the murder.

III.

Translate :

Quando repostum Cæcubum ad festas dapes
   Victore lætus Cæsare
Tecum sub alta, sic Jovi gratum, domo,
   Beate Mæcenas, bibam,
Sonante mixtum tibiis carmen lyra,
   Hac Dorium, illis barbarum?
Ut nuper, actus quum freto Neptunius
   Dux fugit ustis navibus,
Minatus Urbi vincla, quæ detraxerat
   Servis amicus perfidis.
Romanus, eheu, posteri negabitis,
   Emancipatus feminæ
Fert vallum et arma miles et spadonibus
   Servire rugosis potest,
Interque signa turpe militaria
   Sol adspicit conopium.
At hoc frementes, verterunt bis mille equos
   Galli, canentes Cæsarem,
Hostiliumque navium portu latent
   Puppes sinistrorsum citæ.
Io Triumphe, tu moraris aureos
   Currus et intactas boves?

Io Triumphe, nec Jugurthino parem
 Bello reportasti ducem,
Neque Africanum, cui super Carthaginem
 Virtus sepulchrum condidit.

<div align="right">HORACE, <i>Epodes</i>, ix.</div>

1. Give a scale of the Iambic Senarian, as used by Horace in the Epodes.

2. *Freto.* What? *Neptunius dux.* Who?

3. *Feminæ.* In what case, and why?

4. *Potest.* Give the corresponding Greek term.

5. *Conopium.* What? Whence derived?

6. *Hoc.* In what case, and why?

7. *Galli.* Who? Describe the position of their country.

8. *Sinistrorsum.* What is the meaning?

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TRANSLATION INTO LATIN PROSE AND VERSE.

Examiners: { Rev. John McCaul, LL.D.
{ Thomas Moss, M.A.

I.

I have assisted your commanders with naval forces, so that not one of your allies can equal me; I have furnished supplies by land and and by sea; I have been present at all the naval battles, that have taken place; I have no where spared my labour or my risk. I have suffered that which is most wretched in war, a siege, having been shut in at Pergamus with the utmost danger at once of my life and of my kingdom. Afterwards having been freed from the siege, I met your consul with my whole fleet at the Hellespont, that I might assist him in getting his army over. After your army had crossed into Asia, I never departed from the consul; no Roman soldier was more regular in your camp than I and my brother. No expedition, no cavalry engagement took place without me.

Navalis copia, ut nemo vester socius ego œquiparo possum, imperator vester adjuvo; commeatus terra mareque suppedito; navalis prœlium, qui fio, omnis adsum; nec labor meus, nec periculum usquam parco. Qui miser sum in bellum, obsidio patior, Pergamus includo cum discrimen ultra simul vita regnum que. Libero deinde obsidio, totus classis ad Hellespontus consul vester occurro, ut is in trajicio exercitus adjuvo: postquam in Asia exercitus vester transgredior, nunquam a consul abscedo: nemo miles Romanus magis assiduus in castra vester sum, quam ego frater que meus. Nullus expeditio, nullus equestris prœlium sine ego fio.

II.

How happy had it been for him to have died in that sickness, when all Italy was putting up vows and prayers for his safety! or if he had fallen by the chance of war, on the plains of Pharsalia, in the defence of his country's liberty, he had died still glorious, though unfortunate: but as if he had been reserved for an example of the instability of human greatness, he who a few days before commanded kings and consuls, and all the noblest of Rome, was sentenced to die by a council of slaves; murdered by a base deserter; cast out naked and headless on the Egyptian strand; and, when the whole earth, as Velleius says, had scarce been sufficient for his victories, could not find a spot upon it at last for a grave. His body was burnt on the shore by one of his freedmen, with the planks of an old fishing-boat: and his ashes being conveyed to Rome, were deposited, privately, by his wife Cornelia, in a vault of his Alban villa. The Egyptians, however, raised a monument to him on the place, and adorned it with figures of brass, which being defaced afterwards by time, and buried almost in sand and rubbish, was sought out and restored by the Emperor Hadrian.

III.

The wind, that beats the mountain, blows
  More softly round the open wold,
And gently comes the world to those
  That are cast in gentler mould.
And me this knowledge bolder made,
  Or else I had not dared to flow
In these words toward you, and invade
  Even with a verse your holy woe.
'Tis strange that those we lean on most,
  Those in whose laps our limbs are nursed,
Fall into shadow, soonest lost:
  Those we love first are taken first.
God gives us love. Something to love
  He lends us; but, when love is grown
To ripeness, that on which it throve
  Falls off, and love is left alone.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

STATICS AND DYNAMICS.

Examiner: REV. W. JONES, B. A.

1. Enunciate the parallelogram of forces, and assuming its truth as regards the direction of the resultant, prove it for the magnitude of the resultant.

Also assuming its truth for the magnitude of the resultant prove it for the direction of the resultant.

2. State and prove the triangle of force.

Two forces act at a point. Their magnitude and the angle made by one of them with a fixed line being given; shew that in general equilibrium may be maintained by either of two forces acting at the point in a direction parallel to the fixed line.

Point out the exceptional cases.

3. Enunciate the condition of equilibrium of a rigid body capable of turning about a fixed point, when acted on by any forces in a plane passing through that point.

State the different propositions which must be proved in order to establish this condition of equilibrium.

A uniform wire is formed into a triangle ABC, right angled at C, and is suspended from C, θ is the angle which the side AC makes with the vertical; shew that $\tan \theta = \dfrac{a}{b} \cdot \dfrac{a+c}{b+c}$.

4. Shew that every system of heavy particles has one, and only one centre of gravity.

Investigate the position of the centre of gravity of a triangular lamina, and shew that it coincides with that of three equal heavy particles placed at the angular points of the triangle.

5. When

that the poin
must lie in th

A triangle
from A and B
with the verti

6. Describe
ated.

7. Describe
separate string
relation betwe
of the pullies
account.

Shew that i
mechanical adv

8. Explain
(i.) when unif
What is the
$s = ut + \frac{1}{2}ft$

9. Two bodi
which passes ov
each body, and

10. Find the
of a particle pr
tal plane.

Shew that t

motion to the p

If θ, ϕ be the
to the path of a
scribing the arc

11. Two inela
find their velocit

Two balls B
opposite directio
each equal A, r

direction, each r

12. A ball A
mutual elasticity
after impact.

5. When a rigid body is suspended from a fixed point, shew that the point of suspension and the centre of gravity of the body must lie in the same vertical line.

A triangle ABC, right angled at C, is suspended successively from A and B : if θ, ϕ be the angles made by AC, BC respectively, with the vertical in each position ; shew that $\cot \theta . \cot \phi = 4$.

6. Describe the common steelyard, and shew how it is graduated.

7. Describe that system of pullies, in which each hangs by a separate string, the last pully supporting the weight. Find the relation between P and W for this system, (i.) when the weights of the pullies are neglected, and (ii.) when they are taken into account.

Shew that if the weight of each of the pullies equals P, no mechanical advantage is gained or lost by the system.

8. Explain how velocity and acceleration are measured (i.) when uniform, and (ii.) when variable.

What is the meaning of each of the symbols in the formula $s = ut + \frac{1}{2} ft^2$? Prove this formula.

9. Two bodies P and Q are connected by an inextensible string which passes over a smooth fixed pully ; find the acceleration of each body, and the tension of the string.

10. Find the range, time of flight, and the greatest elevation of a particle projected in any direction from a point in a horizontal plane.

Shew that the tangent of the inclination of the direction of motion to the plane at any time $= \dfrac{\text{vertical velocity}}{\text{horizontal velocity.}}$

If θ, ϕ be the angles made with the horizon by the tangents to the path of a projectile at the points P and Q, the time of describing the arc P Q is proportional to $(\tan \theta - \tan \phi.)$.

11. Two inelastic balls impinge directly with given velocities, find their velocity after impact.

Two balls B and C moving with the same velocity v, but in opposite directions, after direct impact respectively with two balls each equal A, moving with the same velocity and in the same direction, each move with a velocity u ; shew that $\dfrac{B}{C} = \dfrac{v+u}{v-u}.$

12. A ball A impinges obliquely upon a ball B at rest, their mutual elasticity being e ; determine the motion of each ball after impact.

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SECOND YEAR.

ANALYTICAL GEOMETRY.

HONORS AND SCHOLARSHIPS.

Examiner: REV. W. JONES. B. A.

1. Define the locus of an equation. What are the loci of the following equations ?

  (i.) $(Ax + By + C)^2 + (A'x + B'y + C')^2 = 0$

  (ii.) $(Ax + By + C)(A'x + B'y + C') = 0$

  (iii.) $f\left(\dfrac{y}{x}\right) = 0$ (iv.) $f(r) = 0$ (v.) $f(\theta) = 0$.

2. Shew how to find the equation to a line which passes through the intersection of two lines whose equations are given, and also through another point.

Shew that the lines which pass through the origin, and the intersection of the line $\dfrac{x}{a} + \dfrac{y}{\beta} = 1$ with the lines $\dfrac{x}{a} + \dfrac{y}{b} = 1$ and $\dfrac{x}{a'} + \dfrac{y}{b'} = 1$ will be at right angles to each other, if

$$\left(\frac{1}{a} - \frac{1}{a}\right)\left(\frac{1}{a} - \frac{1}{a'}\right) + \left(\frac{1}{\beta} - \frac{1}{b}\right)\left(\frac{1}{b} - \frac{1}{b'}\right) = 0.$$

3. Find an expression for the area of a triangle in terms of the polar co-ordinates of its angular points, and deduce the expression in terms of the rectangular co-ordinates of its angular points.

Shew that the area of the triangle made by the three lines whose equations are given in question 2 is

$$\pm \tfrac{1}{2}\left\{\frac{aa'(b - b')^2}{ab' - a'b} + \frac{a'a(b' - \beta)^2}{a'\beta - ab'} + \frac{aa(\beta - b)^2}{ab - a\beta}\right\}$$

4. Obtain the general equation to the circle in the form
$$x^2 + y^2 + Ax + By + C = 0$$
O is a fixed point from which any straight line is drawn meeting a fixed straight line in P ; in OP a point Q is taken such that the rectangle OP. OQ is constant, shew that the locus of Q is a circle, and find its centre and radius.

5. What is the test by which we determine whether the general equation of the second degree represents a central curve or not? If it represent a central curve and be reduced to the form $Ax^2 + By^2 + 2Cxy + F = 0$, shew how it may be further reduced to the form $Ax^2 + By^2 + F = 0$ by a proper choice of axes.

6. Investigate the equation to the tangent to the ellipse $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} = 1$ at the point $x'y'$, and express it in the form

$$x \cos\alpha + y \sin\alpha = \sqrt{a^2\cos^2\alpha + b^2\sin^2\alpha}$$

If two tangents drawn through an external point h, k make with the major axis the angles a, a', shew that $\cot a + \cot a' = -\dfrac{2hk}{b^2 - k^2}$.

7. Shew that the points of the intersection of a tangent to an ellipse with the perpendiculars on it from the foci lie on the circumference of the auxiliary circle.

Hence obtain a geometrical construction for drawing the tangents to an ellipse from an external point.

8. Shew that the polar equation to a conic section is $\dfrac{l}{r} = 1 + e\cos\theta$, and that the polar equation to its tangent at the point whose angular co-ordinate is a, is $\dfrac{l}{r} = \cos(\theta - a) + e\cos\theta$.

9. Define pole and polar. Shew that the polar of a point $x_1, y_1,$ with respect to the ellipse $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} = 1$ is $\dfrac{xx_1}{a^2} + \dfrac{yy_1}{b^2} = 1$.

If from any point in a line at right angles to an axis of the ellipse a line be drawn perpendicular to the polar of the point, it will intersect that axis in a fixed point.

10. Define conjugate diameters and supplemental chords in an ellipse, and prove that diameters drawn parallel to a pair of supplemental chords are conjugate.

11. Find the equation to a hyperbola when referred to its asymptotes as co-ordinate axes.

What is the general equation to a hyperbola having two given straight lines as asymptotes?

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

DIFFERENTIAL CALCULUS.

HONORS AND SCHOLARSHIPS.

Examiner: REV. W. JONES, B.A.

1. Shew that the limiting value to which $\left(1 + \dfrac{1}{x}\right)^x$ approaches, as x is increased indefinitely, is the same whan x is negative or fractional as when it is a positive integer.

Define a differential co-efficient. From your definition find those of $\log(ax)$, and a^x with respect to x. Also find from a figure that of $\tan \theta$ with respect to θ.

2. If $y = f(z)$ and $z = \phi(x)$, find $\dfrac{dy}{dx}$.

Differentiate with respect to x

    (i) $(\tan x)^{\tan^{-1} x}$,   (ii) $e^x \csc x$,

    (iii) $\log (\operatorname{vers} x)$,   (iv) $\log \dfrac{x}{a + \sqrt{a^2 + x^2}}$.

3. Find the rth differential co-efficient of

    (i) $e^{px} \sin qx$,   (ii) $\dfrac{1}{a^2 + x^2}$.

4. Prove the formula, $\dfrac{F(x+h)}{h^n} = \dfrac{F'(x + \theta h)}{n(\theta h)^{n-1}}$, stating clearly the conditions under which it holds.

5. Investigate a method of determining the maximum and minimum values of a function of one variable.

If $x + y = 2c$, shew that $x = y$ makes $f(x) \times f(y)$ a maximum or a minimum, as $f(c) \times f''(c)$ is less or greater than $\{f'(c)\}^2$.

6. Shew how to find the asymptotes to an algebraic curve (i) which are parallel to, (ii) which are not parallel to the axes.

Find the asymptotes of the curves

(i) $xy\, (y - x)^2 - a^3 y = a^4$,

(ii) $x^3 - xy^2 + ay^2 = 0$.

7. Define the circle of curvature at any point of a plane curve, and prove that if s be the length of the arc measured from a fixed point, ϕ the angle of deflection of the tangent from its initial position at the fixed point, shew that the radius of curvature $\rho = \dfrac{ds}{d\phi}$. Hence deduce the expression for ρ in rectilinear co-ordinates.

8. Define the polar subtangent of a curve $r = f(\theta)$, and shew that it is equal to $r^2 \dfrac{d\theta}{dr}$.

Shew how to find the rectilinear and circular asymptotes of a polar curve.

Find the asymptotes of the curve, $\dfrac{r}{a} = \dfrac{2\theta - \pi}{3\theta - 2\pi}$.

9. Shew how to find the envelope of a series of curves given by the equation $f(x, y, a) = 0$, a being a variable parameter.

Find the envelope of the lines

$$\frac{ax}{\cos a} - \frac{by}{\sin a} = a^2 - b^2.$$

10. Shew that $\int x^{m-1} (a + bx^n)^{\frac{p}{q}} dx$ can be immediately integrated, if $\dfrac{m}{n}$ be a positive integer, or $\dfrac{p}{q} + \dfrac{m}{n}$ be a negative integer.

11. Investigate the formula for integration by parts, and apply it to integrate the functions $\tan^{-1} \dfrac{x}{a}$, $x \sin^{-1} x$.

12. Integrate the following functions :

(i) $\dfrac{1}{\sqrt{x^2 - a^2}}$,

(ii) $\dfrac{1}{a + b \cos x}$,

(iii) $\dfrac{x^2 - 1}{x^4 + x^2 + 1}$,

(iv) $\cos \theta . \log \cos \theta$.

Find a formula of reduction for $\displaystyle\int \dfrac{dx}{(x^2 + a^2)^n}$.

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SECOND YEAR.

NEWTON, SECTIONS I., II., III.

Examiner : J. B. Cherriman, M.A.

1. State and prove Lemma 2, Section I.

If the equal bases be each divided into n equal parts, and on these as bases two series of parallelograms be constructed as in the Lemma, the difference between these two series will be $\frac{1}{n}$th of that in the Lemma; how then can each of the four series have the same limit ?

2. Define "similar" curvilinear figures, and prove that similar conterminous arcs, which have their chords coincident, have a common tangent.

At corresponding points of two similar curves, the tangents are equally inclined to the radius-vectors, and the curvatures are proportional.

3. Obtain Newton's expression for the radius of curvature.

If a curve pass through the origin, touching the axis of y, (coordinates rectangular,) the radius of curvature there $= \frac{1}{2}$ Lt $: \frac{y^2}{x}$; or if the curve be referred to polar coordinates, a point in the curve being pole and the tangent being initial line, the radius of curvature then $= \frac{1}{2}$ Lt $: \frac{r}{\theta}$.

4. Prove Prop. 1, Section II.

If impulses be communicated, as in the proposition, along parallel and equidistant lines, the times of the body moving from

one line to the next are the same. What does this become in the limit ?

5. If PQ be an arc of a plane orbit described by a body in time T, and QR be the subtense parallel to the direction of the resultant force at P; then, when PQ and T are diminished indefinitely,

$$\text{Force at } P = 2 \text{ Lt}: \frac{QR}{T^2}.$$

Deduce expressions from which may be found the law of force tending to a fixed centre by which a given orbit may be described, and the velocity at any point.

If the whole acceleration at P be resolved into two, one along the tangent and the other along the normal, and QR be the perpendicular subtense, shew that the latter component is $2 \text{ Lt}: \frac{QR}{T^2}$, but the former is not $2 \text{ Lt}: \frac{PQ}{T^2}$.

6. A body revolves in the circumference of a circle, to find the law of force by which it is attracted to a given point. (Prop. 7.)

If the centre of force be an external point, what part of the circle will be described ?

Deduce the law of force when it acts in parallel lines.

7. A body describes a hyperbola round a centre of force in its geometrical centre, to find the law of force. (Prop. 10.)

In all similar hyperbolas described under the same force tending to the centre, the times of describing a given angle from the apse are the same.

8. A body revolves in an ellipse or hyperbola, to find the law of force tending to a focus. (Props. 11, 12.)

A particle at an assigned point, moving in a given direction with given velocity about a fixed centre of force which varies as $\frac{1}{(\text{Dist})^2}$, may be describing either of two distinct hyperbolas, according as the force is attractive or repulsive; shew that the *latera recta* of these hyperbolas are the same, but the lengths of the transverse axes are not.

9. Obtain an expression for the angular velocity at any point in a central orbit.

In an ellipse round the focus, excentricity being $\frac{1}{\sqrt{2}}$, the difference between the greatest and least angular velocities is eight times the mean angular velocity.

10. State Kepler's laws of the planetary motions, and examine what inferences can be drawn therefrom by aid of the propositions in these sections.

How is the third law to be extended so as to include the cases of parabolic or hyperbolic orbits?

Shew how the force of gravity at the earth's surface may be compared with the force, tending to the earth's centre, which retains the moon in her orbit.

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SECOND AND THIRD YEARS, AND CANDIDATES FOR B.A.

PROBLEMS.

HONORS.

Examiners: $\begin{cases} \text{J. B. Cherriman, M.A.} \\ \text{Rev. W. Jones, B.A.} \end{cases}$

1. If $f(x)$ be a rational and integral function of x of less than n dimensions, and $a, b, c, \ldots\ldots$ be n quantities, prove

$$\frac{f(a)}{a} \cdot \frac{1}{(a-b)(a-c)\ldots} + \frac{f(b)}{b} \cdot \frac{1}{(b-a)(b-c)\ldots} + \ldots$$
$$= \underline{\quad}^{n-1} \cdot \frac{f(0)}{abc\ldots}.$$

2. In a fixed line AB, any point M is taken, and AM is divided in a given ratio in N; through M a perpendicular to AB is drawn, and in it a point P is taken such that $AP + AN$ is constant. Shew that the locus of P is a conic.

3. In a rectangular hyperbola, the length of normal intercepted by the axes is bisected by the curve, and is equal to the length of the corresponding tangent intercepted between the asymptotes.

4. C is the centre of a hyperbola, and CP, CD are conjugates; PD is produced to cut the axes, and perpendiculars to them are erected at the points of section. Prove that these perpendiculars meet the intermediate asymptote in the same point as the tangent at P does.

5. In a central conic, (excentricity e, conjugate axis $2b$,) the

tangent of the angle between the tangent at a point $(x, y,)$ and the central radius vector, is

$$\frac{1}{e^2} \cdot \frac{b^2}{xy} \ ,$$

the principal axes being axes of co-ordinates.

6. If PF be the perpendicular dropped from any point P of an ellipse upon the conjugate CD produced, and another ellipse be constructed with F as centre, FP as one semi-axis, and the other semi-axis equal to CD; shew that the two ellipses will cut off equal chords from any line drawn parallel to CD.

7. Parabolas are described with the same vertex and all touching the same straight line; find the locus of their foci.

8. Through each of two points of a curve a line is drawn equally inclined in the same sense to the tangent there; shew that as one of these lines approaches to coincidence with the other, their ultimate intersection is the foot of the perpendicular dropped on the latter from the centre of curvature at the corresponding point.

9. Find the value for $x = 0$, of $\dfrac{d^2}{dx^2}(x \cot x)$; and shew that if the value of $\dfrac{d^r}{dx^r}(x \cot x)$ for $x = 0$, be denoted by $\underline{|r} \ u_r,$ then will, for values of n greater than 1,

$$-\frac{2n+1}{2} u_{2n} = u_{2n-2} \ u_2 + u_{2n-4} \ u_4 + \cdots$$
$$\cdots\cdots + u_{n+1} \ u_{n-1}, \ (n \text{ odd})$$
$$\cdots\cdots + \frac{1}{2} u_n^2, \qquad (n \text{ even}).$$

10. Two given points A, B, lie outside a circle, (centre C); P is a point on the circumference such that the path APB is a minimum: shew that CP produced will bisect the angle APB.

11. No parallelogram inscribed in an ellipse can exceed half the rectangle under the axes.

12. Two similar and equal conics are placed with their vertices and the direction of their transverse axis coincident, their concavities being turned in opposite directions: one remains fixed, and the other rolls upon it; shew how to find the locus of a point whose position relative to the rolling curve is fixed.

If the curves are parabolas, shew that the locus of the focus of the rolling curve is the directrix of the fixed curve; also find the locus of the vertex of the rolling curve.

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13. Shew how the *trisectrix*, $r = 2a \cos \theta - a$, is generated by taking points upon conterminous chords of a circle, and explain the reason for its name.

Trace the curve completely, and shew that the area between the circle and outer branch of the curve exceeds that between the circle and the inner branch by the area of the circle.

14. Two forces acting at a fixed point are represented by chords of a given ellipse, drawn parallel to pairs of conjugate diameters; shew that their resultant is constant in magnitude and direction.

15. A line moves so as always to form with two fixed straight lines a triangle of constant area; shew that the locus of the centre of gravity of the triangle is hyperbola.

16. From a point in either of two confocal ellipses a perfectly elastic ball is projected in a direction which would pass through one of the foci, and after impinging $(2n - 1)$ times on the ellipses returns to the point of projection; shew that the length of its path is n times the difference of the major-axes of the ellipses.

17. Parabolas in the same vertical plane are described by particles projected from the same point with the same velocity but in different directions; P is a point in which the initial tangent to one of the parabolas meets a vertical which passes through the point where that parabola meets a fixed line; shew that the locus of P is a circle.

18. If S, R, be two centres of force round which the same orbit can be described separately by a body in the same periodic time, and SR meet the tangent at P in T; the duplicate ratio of the forces at P in the two cases is

$$RT^2 RP : ST^2 SP.$$

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ANNUAL EXAMINATIONS: 1864

FACULTY OF LAW, FIRST YEAR.

FACULTY OF ARTS, SECOND YEAR.

ENGLISH.

Examiners: { D. WILSON, LL.D.
{ J. A. BOYD, M.A.

***Answers to all the questions are not indispensable; but FULL ANSWERS are required to as many as can be overtaken within the time.*

1. *He was the bravest that Rome sent forth.*

He was the first that came.

There is an elliptical form here, involving ambiguity; define all possible meanings, and re-construct the sentences so as clearly to express each.

(a.) "I was never yet once, and commend their resolutions who never marry twice."

Religio Medici.

(b.) "If it were done when 'tis done, then 'twere well
It were done quickly."

Macbeth.

(c.) "O, it is monstrous! monstrous!
Methought, the billows spoke, and told me of it;
The winds did sing it to me; and the thunder,
That deep and dreadful organ-pipe, pronounced
The name of Prospero."

Tempest.

(*d.*) " After the most straightest sect of our religion, I lived a Pharisee."

<div align="right">*St. Paul.*</div>

(*e.*) " It was prettily devised of Æsop: The fly sate on the axle-tree of the chariot wheel, and said: What a dust do I raise! So are there some vain persons, that, whatsoever goeth alone, or moveth upon greater means, if they have never so little hand in it, they think it is they that carry it."

<div align="right">*Bacon.*</div>

(*f*) " O, pardon me, though piece of bleeding earth,
That I am meek and gentle with these butchers!
Thou art the ruins of the noblest man
That ever lived in the tide of times.
Woe to the hand that shed this costly blood!
Over thy wounds now do I prophecy,
Which like dumb mouths, do ope their ruby lips,
To beg the voice and utterance of my tongue."

<div align="right">*Julius Cæsar.*</div>

(*g.*) " Not on thy sole, but on thy soul, harsh Jew,
Thou mak'st thy knife keen."

<div align="right">*Merchant of Venice.*</div>

2. What syntactical peculiarities in *a, d,* and *e?* Is the structure in accordance with modern usage?

3. Point out and define all the rhetorical figures used in the above sentences.

4. Name the author of the " *Euphues,*" and state what influence it exercised on English literature.

5. Name the works of Sir Phillip Sydney, and describe their peculiar characteristics.

6. Seeing that the *Faerie Queen* and the *Paradise Lost* are both Epics, define the significance of the term, and point out wherein the essential differences between the two consist.

7. To what class of works do the "*Shepherd's Calendar,*" the "*Rape of Lucrece,*" "*The Tempest,*" "*Lycidas,*"

" *Comus,*" and the "*Absolom and Achitophel,*" belong?
Give reasons for the classification, and name the author of
each.

8. COMPOSITION.—" Bacon's *Advancement of Learning,*
and his *Novum Organum,* have more in them of the spirit
of poetry than of science; and we should almost as soon
think of fathering modern physical science upon *Paradise
Lost* as upon them."

Craik.

*Maintain, or refute this, concisely; writing with care, as
a specimen of correct composition.*

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

HISTORY.

Examiners: { D. Wilson, LL.D.
J. A. Boyd, M. A.

***Answers to all the questions are not indispensable; but* FULL ANSWERS *are required to as many as can be overtaken within the time.*

I. Outlines of Mediæval History.

(1.) What events mark the beginning and the close of Mediæval History? Apportion and characterize the periods into which it may be divided.

(2.) What causes contributed to the extinction of feudalism? Explain generally how it was that thereafter a free constitution was established in England, but absolute monarchies arose on the continent.

(3.) Describe the character and historical importance of Gregory VII.

(4.) Sketch the establishment and progress of the Swiss confederacy, and the manner in which it maintained its independence.

(5.) Sketch the history of the Hanseatic League.

II. British History, from Henry VIII. to the Revolution.

(1.) Contrast briefly the Reformation in England and Scotland, as regards its introduction, progress, and results.

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(2.) State the circumstances which led to the downfall of the Earl of Essex, in Elizabeth's reign.

(3.) "When Elizabeth came to the throne," says Lingard, "England ranked only among the secondary kingdoms; before her death it had risen to a level with the first nations of Europe." Detail the chief causes whereby this was effected.

(4.) What differences of opinion existed as to Elizabeth's successor, and what considerations ultimately prevailed?

(5.) When and by whom was the "Declaration of Rights" drawn up and confirmed? What are its most important provisions?
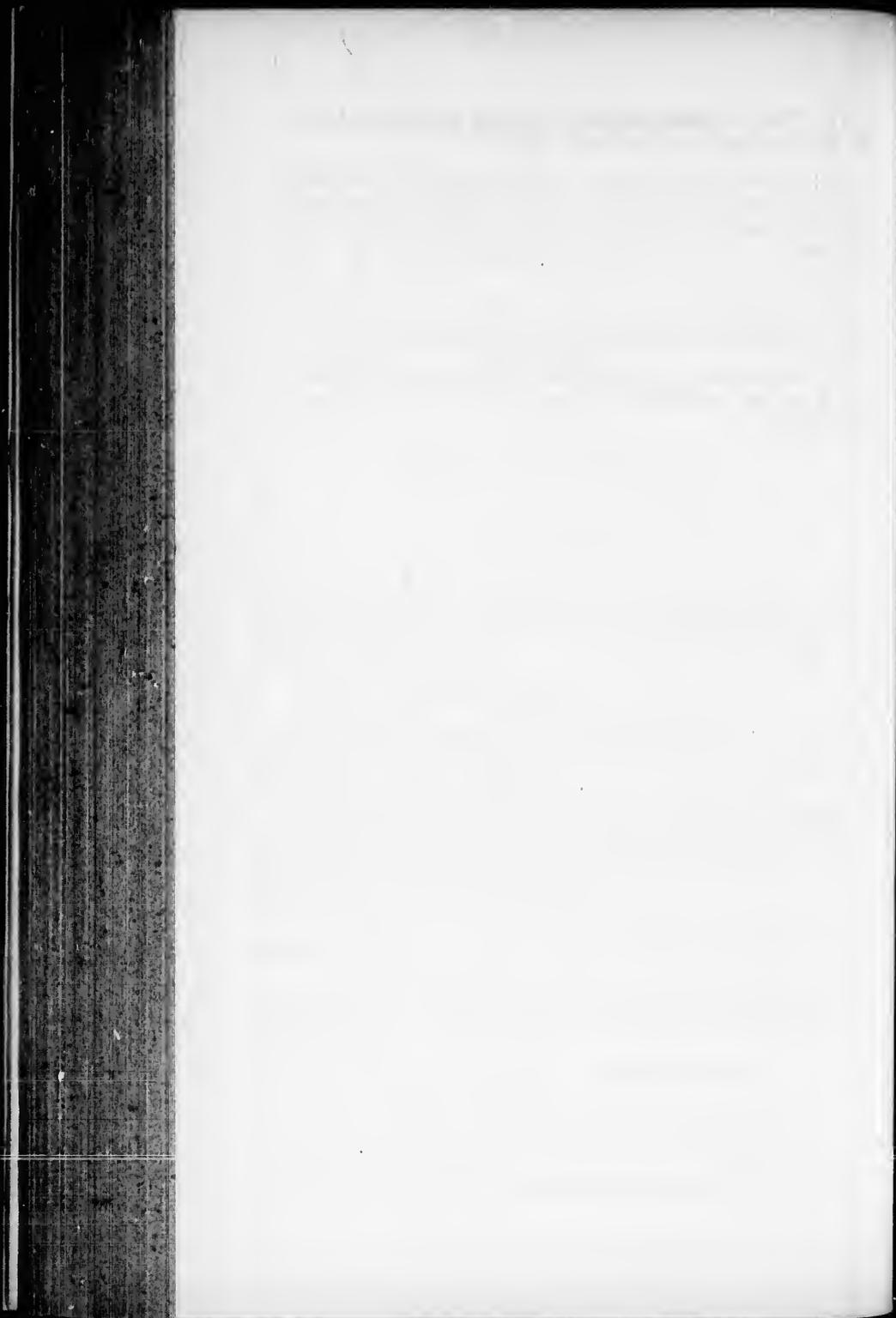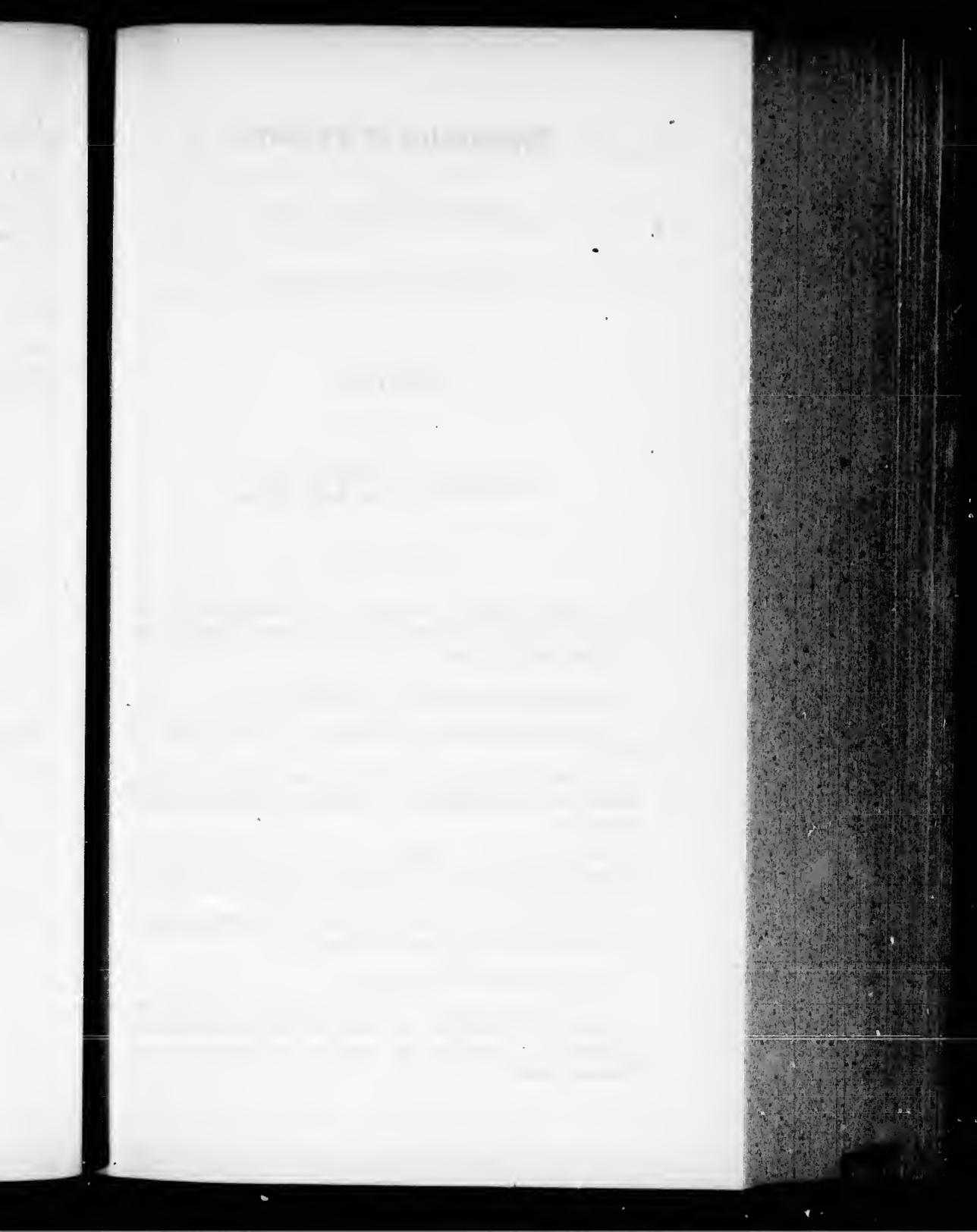
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ANNUAL EXAMINATIONS: 1864.

FIRST YEAR. (In Law.)

HISTORY.

Examiners: { D. Wilson, LL.D.
{ J. A. Boyd, M. A.

**Answers to all the questions are not indispensable; but FULL ANSWERS are required to to as many as can be overtaken within the time.

I. British history, Charles I. to William III.

(1.) Trace the descent of Charles I. from the house of Tudor.

(2.) When and by whom was the Declaration of Rights drawn up and confirmed? What are its most important provisions?

(3.) What great constitutional principle was settled by raising William III. to the throne? Give some account of the parliamentary discussions which preceded this event.

(4.) What do you understand by the "Act of Settlement"? Set forth its most important enactments.

II. Salic law and Feudal system.

(1.) What contributed to the extinction of feudalism? Explain how it was that thereafter a free constitution was established in England, but absolute monarchies arose on the continent.

(2) What was the chief object of the Salic Law? Why so called? In what manner was its observance established as a constitutional principle in France?

(3.) In what respects did feudalism, as it obtained in England, differ from continental feudalism? State the causes of this difference.

(4.) Give some account of the feudal incidents of escheats, aids, and wardship.

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SECOND YEAR.

ENGLISH.

HONORS AND SCHOLARSHIPS.

Examiners : { D. Wilson, LL.D.
J. A. Boyd, M.A.

" Merchant of Venice ;" Etymology and *Synonyms.*

(1.) Set forth the peculiarities of structure in this play, and give the sources wherefrom the plot was drawn.

(2.) Describe and contrast the characters of Antonio and Shylock, of Portia and Jessica.

(3.) Cite passages which refer or allude to circumstances of English history contemporaneous with the date of the play.

(4.) Give the origin and meaning of the following words: "vailing," "eanlings," "sonties," "ostent," "peize," "tranect," "patines."

(5.) *" Lor.* The moon shines bright.—In such a night as this,
When the sweet wind did gently kiss the trees,
And they did make no *noise ;* in such a night,
Troilus, methinks, *mounted* the Trojan walls,
And *sighed* his soul toward the Grecian tents,
Where Cressid lay that night.
    Jes.   In such a night
Did Thisbe fearfully o'ertrip the dew ;
And saw the lion's shadow ere himself,
And ran *dismayed* away,

(6.)

(7.)

> *Lor.*   In such a night,
> Stood Dido, with a willow in her hand,
> Upon the *wild* sea-banks, and *waved* her love
> To come again to Carthage.
>   *Jes.*   In such a night
> Medea *gathered* the *enchanted* herbs
> That did *renew* old Æson."

(*a.*) Point out all the figures (syntactical and rhetorical) in the foregoing passage.

(*b.*) From what sources did Shakspeare draw his classical references therein? Mention the variations made by Shakspeare upon his originals.

(*c.*) Give an epitome of the classic stories referred to.

(*d.*) Give groups of synonyms for the *italicised* words, distinguishing between the shades of meaning of the words in each group.

(6.) Give the derivations of, and where applicable, the transmutations of meaning in the following words: "*Younker*," "*anon*," "*renowned suitors*," "*pagan*," "*usance*," "*bankrupt*," "*knave*," "*unbated*," "*moiety*," "*shrewd*" and "*gossip*."

(7.) Parse the following phrases :—
"He falls straight a capering."
"I do know a many fools."
"I scant this breathing courtesy."
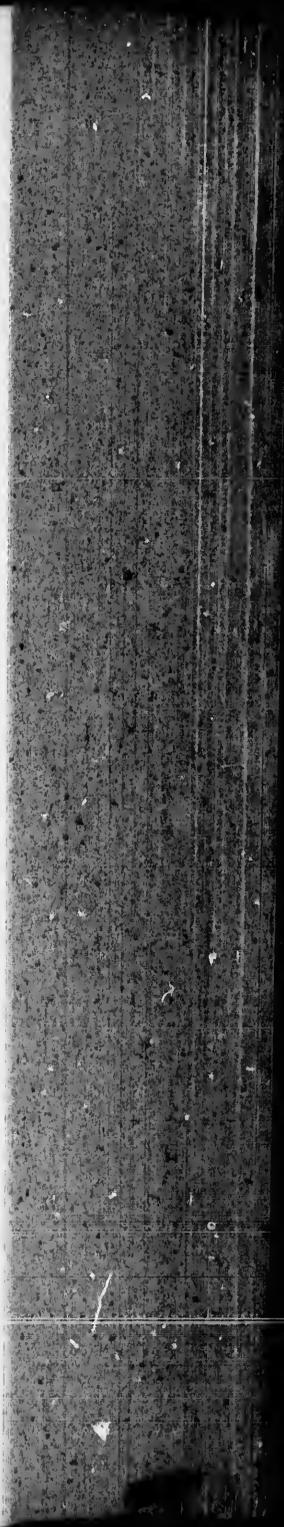
University of Toronto.

ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

HISTORY.

HONORS AND SCHOLARSHIPS.

Examiners: } D. WILSON, LL.D.
J. A. BOYD, M.A.

**Answers to all the questions are not indispensable; but FULL ANSWERS *are required to as many as can be overtaken within the time.*

1. Define the territorial sovereignty of Charles V., and the basis of his claims in each case; and compare the political sub-divisions of Europe at his abdication, with those at the death of Louis XIV.

2. Taylor says: "Two monarchs contemporary with Charles V. were almost equally bound by their interests to check the preponderance of the house of Austria." Name them; define the obligations of interest in each case; and show how far each accomplished the object.

3. The results of the battle of Pavia are said to have "made Charles V. master of Italy, and arbiter of Europe." Show the grounds of this statement; and the causes which deprived the emperor of any substantial advantages from it.

4. Trace the causes which led the Guise party of France, and the Catholic party of England, to favour Mary Stuart's

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claims to the English throne; and define, and account for the policy of Philip II. and Catherine de Medici in reference to this.

5. State the parties in the struggle, and the principles involved, which were settled by the peace of Westphalia.

6. Construct a genealogical tree, showing the descent of George I. from Henry VII.; and point out every intermediate departure from the regular succession to the English throne, with the causes.

7. Trace the means by which Prussia was raised to the rank of a monarchy; and define its acquisitions of territory under Frederick the Great.

8. Compare in detail the influential relations of England to continental powers, under Cromwell, Charles II. and William III.

9. Specify the parties and the terms of agreement of the Peace of Ryswick, and of Utrecht; and trace the influence of each on subsequent European history.

10. Trace the causes, and results, of the rivalry of Peter the Great and Charles XII. of Sweden.
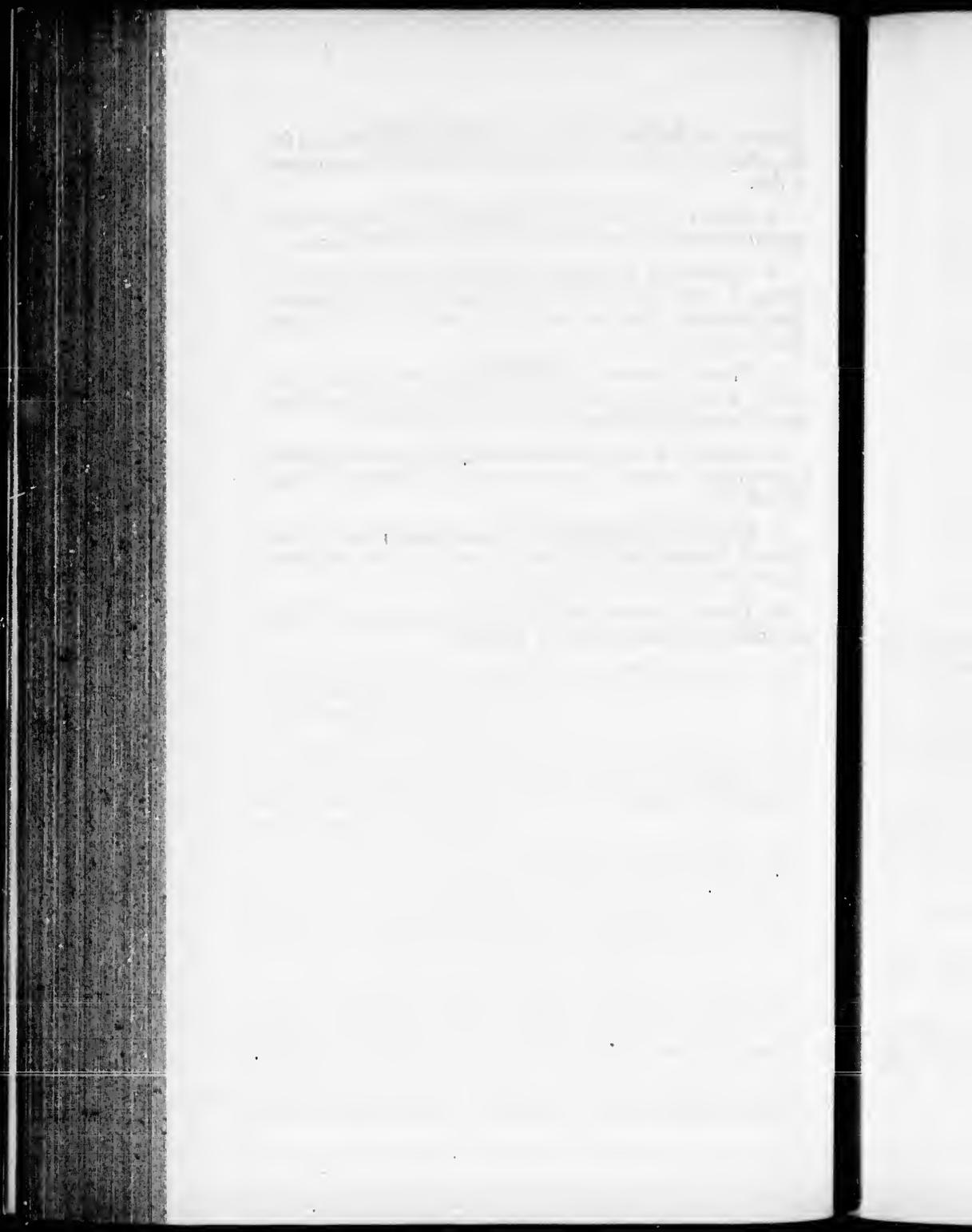
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ANNUAL EXAMINATIONS: 1864.

FIRST YEAR (LAW.)

HISTORY.

HONORS AND SCHOLARSHIPS.

Examiners: { D. Wilson, LL.D.
J. A. Boyd, M. A.

***Answers to all the questions are not indispensable; but
FULL ANSWERS are required to as many as can be over-
taken within the time.

1. What three kingdoms became predominant in the
Saxon Heptarchy prior to the fusion of the whole into one
kingdom?

2. Hallam says: "It was the glory of Alfred to rescue
the Anglo-Saxon monarchy, yet he never subdued the Danes,
nor became master of the whole kingdom." Explain all
that is implied in those statements.

3. Explain the rank and privileges of Thanes and
Ceorls, and the nature of the Witenagemot.

4. What was the law of frank-pledge, and what succes-
sive stages did it pass through?

5. What public burdens affected the tenure of the free-
hold lands of England prior to the conquest; and what
changes were effected by the introduction of Feudal
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6. Give the history, and define the object and character of the *Domesday Book*. What is the object and meaning of its name?

7. Hallam says of the accession of William of Normandy to the English throne, "The state of the country induced, if it did not justify, the measure of tendering the crown to William, which he had a pretext or title to claim." Explain all that is implied in those statements.

8. "Five kings out of the seven that followed William the Conqueror were usurpers, according to modern notions." Set forth the grounds of this statement of Hallam, and trace out the establishment of the hereditary right of succession.

9. Give the history of *Magna Charta*, and state the most important rights guaranteed by it.

10. Explain the nature of *Baronial Tenure*, and its relation to the English parliamentary system, and trace the origin and progress of parliamentary representation.

11. Explain the nature of charters of incorporation, and the influence of the growth of burgal privileges on the development of free institutions in England.

12. State the proceedings of parliament, temp. Richard II., against the Chancellor, Michael de la Pole, Earl of Suffolk, and trace their influence on the development of the resource of parliamentary impeachment.

13. Construct a genealogical tree, showing the relations of the rival claimants to the Crown from Edward III. to Richard III.
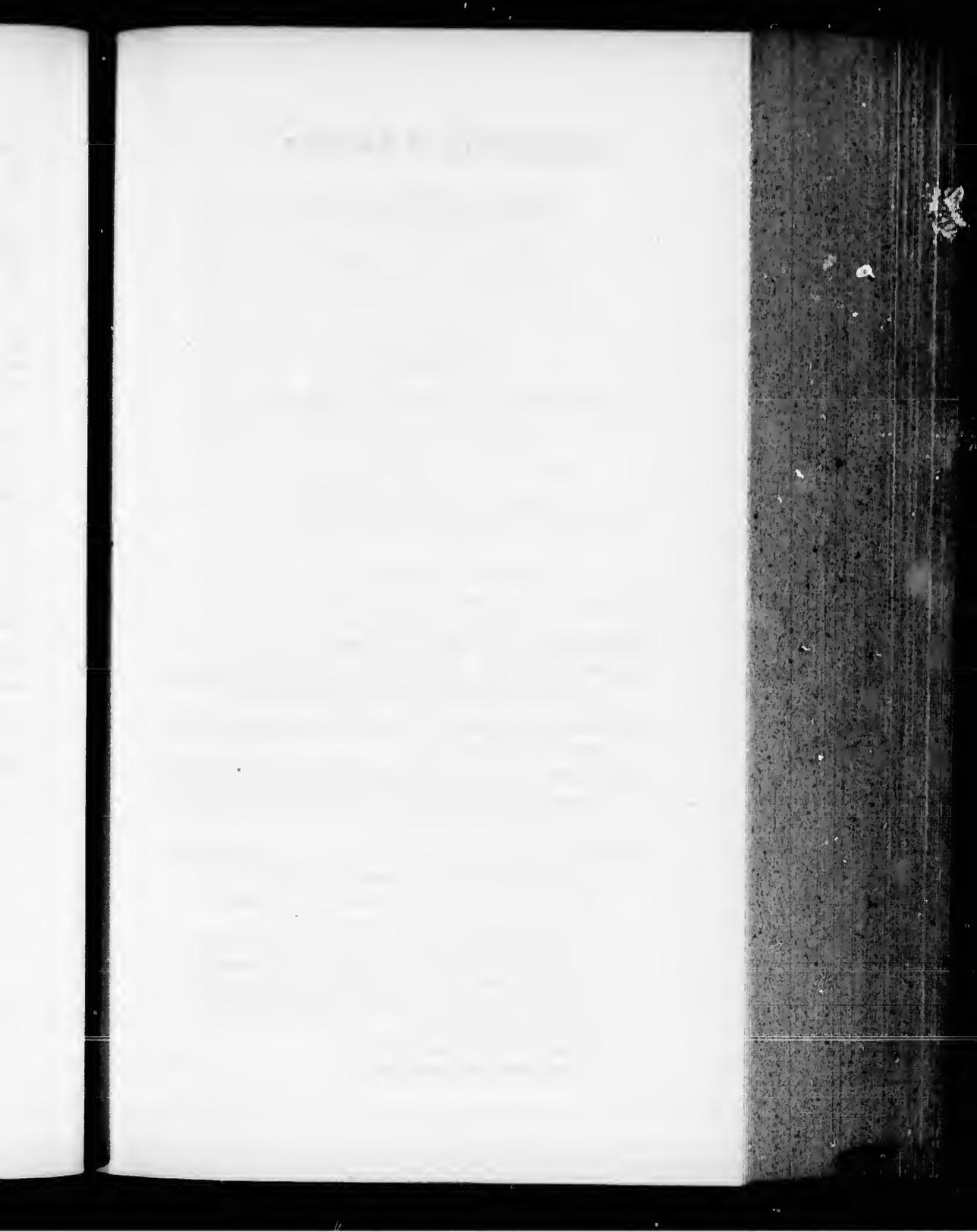
University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR. (LAW.)

ENGLISH.

HONORS AND SCHOLARSHIPS.

Examiners: $\begin{cases} \text{D. WILSON, LL.D.} \\ \text{J. A. BOYD, M.A.} \end{cases}$

"Henry V.;" Etymology and Synonyms.

(1.) What are the peculiarities of structure in this play, and for what purposes are they employed?

(2.) Give an analysis of Henry V.'s character as depicted by Shakspeare.

(3.) State the causes which Shakspeare assigns for the French wars of Henry V., and discuss in how far he is confirmed by history.

(4.) Give the meaning and derivation of the *italicised* words in the following passages of Henry V.:

" We fear the *main intendment* of the Scot;"
" Do but think you stand upon the *rivage ;*"
" *Grapple* your minds to *sternage* of this navy;"
" Let it pry through the *portage* of the head;"
" Whose blood is *fet* from fathers of war-proof;"
" Willing to march on without *impeachment ;*"
" Such a *hilding* foe ;"
" Soaked in *mercenary* blood;"
" *Deracinate* such *savagery ;*"

(5.) "*K. Hen.*   And what art thou, thou idol ceremony?
        *   *   *   *

'Tis not the *balm*, the sceptre, and the ball,
The sword, the mace, the *crown* imperial,
The *inter-tissued* robe of gold and pearl,
The *farced* title running 'fore the king,
The throne he sits on, nor the *tide* of pomp
That beats upon the high *shore* of this world,—
No, not all these, thrice-*gorgeous ceremony*,
Not all these, laid in bed majestical,
Can sleep so soundly as the wretched slave;
Who, with a body *filled*, and *vacant* mind,
Gets him to rest, crammed with distressful bread;
Never sees horrid night, the child of hell;
But, like a *lackey*, from the *rise* to *set*,
Sweats in the *eye* of *Phœbus*, and all night
Sleeps in Elysium."

(*a.*) Point out and name all the figures, rhetorical
and syntactical, in this extract.

(*b.*) What is the meaning of the 5th line?

(*c.*) Paraphrase the last six lines, so as to exhibit
their meaning in ordinary prose.

(*d.*) Collier proposes to read "*distasteful*" for
"*distressful*" in the 12th line: discuss the
propriety of this "emendation."

(*e.*) Give one or more synonyms for the words in
italics.

(6.) Show the connection which exists between this,
and other dramas of the same author.

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

FRENCH.

Examiners: { JAMES FORNERI, L.L.D.
{ ROBERT SULLIVAN, M.A.

I.

Translate into French:

In 1589, Henry the IV. who had only five or six thousand men, was attacked at Arques, a village not far from Dieppe, by the Duke of M—— who had about thirty thousand. That prince, suspecting that the leaguers would turn their principal efforts against his artillery, placed there the Swiss regiment of Glaris upon which he relied much, and Colonel Galaty upon whom he relied still more. What he had foreseen having happened, he flew, according to his custom, where the danger was greatest, "my comrade," said he to Galaty on arriving there, "I come to die or to acquire honour with you." These words had the success they were meant to have, they decided the fate of the battle, the leaguers were repelled on all sides, and completely beaten.

II.

GRAMMATICAL CONSTRUCTION.

1. What do you understand by grammatical construction, and how does it differ from syntax?

2. In sentences briefly interrogative-affirmative, where is the place of the subject, be it a noun or pronoun?

3. Where is the verb and where are the pronouns placed in phrases imperative-affirmative, and in the negative ?

4. What is the order of the words in sentences expositive-affirmative ?   In what do negative sentences differ ?

5. Illustrate each answer by an example.

III.

GRAMMATICAL QUESTIONS.

1. What difference between *elle a gardé le lit* and *elle a gardé son lit ?*

2. Explain the use of the possessive pronouns in French, when connected with any part of the body, or physical and intellectual faculties.

3. In what case or cases can the relative be separated from the antecedent ?

4. When is *que* distributive ?

5. When does *ni l'un ni l'antre* govern the verb in the singular, and when in the plural ?   Give examples ?

6. When are *sortir, demeurer* and *perir* conjugated in the compound tenses with the verb *avoir* and when with the verb *être* ?   Give examples ?

7. When does *si conjunction*, take the future and when the present tense ?

8. Give some examples in which the suppression of *pas* and *point is* obligatory ?

9. What participles past are never declined in the feminine.

10. Name some of the prepositions always repeated, and state the difference between *en* and *dans* in point of time ?

IV.

Translate :

Tel autre fait la satire de ces gens qui s'engagent par inquiétude ou par curiosité dans de long voyages ; qui ne font ni mémoires, ni relations ; qui ne portent point de tablettes ; qui vont pour voir, et qui ne voient pas, ou qui oublient ce qu'ils ont vu ; qui désirent seulement de connaître de nouvelles tours ou de nouveaux clochers,

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et de passer des rivières qu'on n'appelle ni la Seine, ni la Loire ; qui sortent de leur patrie pour y retourner, qui aiment à être absents, qui veulent un jour être revenus de loin: et ce satirique parle juste, et se fait écouter.

1. *Tel autre.* What part of the speech is *tel,* can it be used for *quelque que ?*

2. *De ces gens.* Give the various constructions of *gens ?*

3. *Ni mémoires ni relations,* why not an article ?

4. Point de tablettes, why not des tablettes ?

5. *Nouvelles tours, nouveaux clochers,* what difference in meaning if *nouvelles, nouveaux* are placed after the substantives ?

6. What is the antecedent of the various *qui* in this extract ?

V.

French Literature to the 17th century.   (Sismondi's.)

1. When was the first establishment formed in Paris to amuse the people by regular entertainments, and by whom ?

2. By what name was the company formed of that establishment called ?

3. Which is the most ancient dramatic work of modern Europe ?

4. To whom are we indebted for the invention of the comedy, and how did the comedy originate ?

5. What era is assigned for the commencement of the French literature ?

Translat

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University of Toronto.

SECOND YEAR.

FRENCH.
HONORS AND SCHOLARSHIPS.

Examiners: } James Forneri, LL.D.
Robert Sullivan, M.A.

I.

Translate into English:

> Vous ne démentez point une race funeste ;
> Oui, vous êtes le sang d'Atrée et de Thyeste ;
> Bourreau de votre fille, il ne vous reste enfin
> Que d'en faire à sa mère un horrible festin.
> Barbare ! c'est donc là cet heureux sacrifice
> Que vos soins préparaient avec tant d'artifice !
> Quoi ! l'horreur de souscrire à cet ordre inhumain
> N'a pas, en le traçant arrêté votre main !
> Pourquoi feindre à nos yeux une fausse tristresse ?
> Pensez-vous par des pleurs prouver votre tendresse ?
> Où sont-ils ces combats que vous avez rendus ?
> Quels flots de sang pour elle avez-vous répandus ?
> Quel débris parle ici de votre résistance ?
> Quel champ couvert de morts me condamne au silence ?
> Voilà par quels temoins il fallait me prouver,
> Cruel ! que votre amour a voulu la sauver.

<div align="right">Racine, Iphigénie, Act iv., Scene iv.</div>

1. *Vous êtes le sang d'Atrée et de Thyeste.* Give a short notice of this race.

2. *En faire à sa mère.* What does *en* refer to?

3. *C'est donc là.* Give the force, especially of *là*.

4. *A cet ordre inhumain.* Explain what *ordre*.

5. *En le traçant.* Resolve by a conjunction, tense, and mood.

6. *Pourquoi feindre.* Prefix a verb to *feindre*.

7. *Rendus, répandus.* Why declined?

8. *Voilà.* Resolve it by the demonstrative verb *c'est*, with *temoins* as subject, and followed by the relative *quels*.

9. *Il fallait me prouver.* Resolve *me prouver* into a definite idea.

10. *Que votre amour a voulu la sauver.* Point out the very words of Agamemnon to which these are an answer. (Read the foregoing speech.)

II.

Translate :

ALCESTE.

Monsieur...

ORONTE.

L'état n'a rien qui ne soit au-dessous
Du mérite éclatant que l'on découvre en vous.

ALCESTE.

Monsieur...

ORONTE.

Oui, de ma part je vous tiens préférable
A tout ce que j'y vois de plus considérable.

ALCESTE.

Monsieur...

ORONTE.

Sois-je du ciel écrasé si je mens !
Et, pour vous confirmer ici mes sentiments,
Souffrez qu'à cœur ouvert, monsieur, je vous embrasse,
Et qu'en votre amitié je vous demande place.
Touchez là, s'il vous plait. Vous me la prometez,
Votre amitié ?

ALCESTE.

Monsieur...

ORONTE.

Quoi ! vous y résistez?

ALCESTE.

Monsieur, c'est trop d'honneur que vous me voulez faire ;
Mais l'amitié demande un peu plus de mystére,
Et c'est assurément en profaner le nom
Que de vouloir le mettre à toute occasion.
Avec lumière et choix cette union veut naître ;
Avant que nous lier, il faut nous mieux connaître ;
Et nous pourrions avoir telles complexions),
Que tous deux du marché nous nons repentirions.)

L'MISANTHROPE, acte i., scene ii.

1. *A tout ce que j'y vois.* What does *y* refer to ?

2. *Sois-je du ciel écrasé.* Turn it into an active verb, governed by *pouvoir.*

3. *Pour vous confirmer ici.* Resolve *confirmer* by a conjunction, tense, and mood.

4. *Touchez là.* Explain.

5. *Vous me la prometez, votre amitié.* What figure ?

6. *Quoi! vous y résistez ?* What does *y* refer to ?

7. *Un peu plus de mystère.* Give the force.

8. *Et c'est aisurément, &c.* Destroy the pleonasm, rearrange the sentence in a regular construction, and give the equivalent of *en.*

9. *Avant que nous lier, il faut nous mieux connaître.* Resolve both *lier* and *connaître* by conjunctions, tenses, and moods.

10. *Et nous pourrions avoir.* Change *et* into a causal conjunction, and give the term of condition.

11. *Du marché.* Give the force.

12. *Nous nons repentirions.* Turn it into an infinitive with a preposition, suppressing *que.*

13. Point out the two most striking inversions.

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University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FIRST YEAR, (LAW.)

FRENCH.
HONORS.

Examiners: { JAMES FORNERI, LL.D.
ROBERT SULLIVAN, M.A.

I.

Translate into French :

In 1589, Henry IV., who had only five or six thousand men, was attacked at A——, a village not far from Dieppe, by the Duke of M——, who had about thirty thousand men. That prince suspecting, that the Leaguers would turn their principal efforts against his artillery, placed there the Swiss regiment de Glaris upon which he relied much, and Colonel Galaty upon whom he relied still more. What he had foreseen having happened, he flew, according to his custom, where the danger was greatest. "My comrade," said he to Galaty, on arriving there, "I come to die or to acquire honour with you." These words had the success they were meant to have; they decided the fate of the battle. The Leaguers were repelled on all sides and completely beaten.

II.

Translate into English :

ALCESTE.

Monsieur...

ORONTE.

L'Etat n'a rien qui ne soit au-dessous
Du mérite éclatant que l'on découvre en vous.

Monsieur...

ORONTE.

Oui, de ma part, je vous tiens préférable
A tout ce que j'y vois de plus considerable.

ALCESTE.

Monsieur...

ORONTE.

Sois-je du ciel écrasé, si je mens !
Et, pour vous confirmer ici mes sentiments,
Souffrez qu'a cœur ouvert, monsieur, je vous embrasse,
Et qu'en votre amitié je vous demande place.
Touchez là, s'il vous plait.   Vous me la promettez,
Votre amitié ?

ALCESTE.

Monsieur.

ORONTE.

Quoi ! vous y résistez ?

ALCESTE.

Monsieur, c'est trop d'honneur que vous me voulez faire ;
Mais l'amitié demande un peu plus de mystère ;
Et c'est assurément en profaner le nom
Qne de vouloir le mettre à toute occasion.
Avec lumière et choix cette union veut naitre ;
Avant que nous lier, il faut nous mieux connaître ;
Et nous pourrions avoir telles complexions,
Que tous deux du marché nous nous repentirions.

MOLIERE, *Le Misanthrope*, Act i., Scene ii.

1. *Que j'y vois.*   What does *y* refer to ?

2. *Sois-je du ciel écrasé.*   Turn it into an active verb governed by *pouvoir.*

3. *Pour vous confirmer.*   Resolve *confirmer* by conjunction, tense, and mood.

4. *Touchez là.*   Explain what he means.

5. *Vous me la promettez, votre amitié.*   What figure ?

6. *Quoi ! vous y résistez.*   Give the equivalent of *y.*

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9. *A* Resolve mood.

10. *E* junction,

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7. *Un peu plus de mystère.* Give the force.

8. *Et c'est assurement, &c.* Destroy the pleonasm, rearrange the sentence into a regular order, and give the equivalent of *en*.

9. *Avant que nous lier, il faut nous mieux connaître.* Resolve both *lier* and *connaître* by conjunction, tense, and mood.

10. *Et nous pourrions avoir.* Turn *et* into a causal conjunction, and give the term of condition.

11. *Du marché.* Give the force.

12. *Nous nous repentirions.* Turn it into an infinitive with a preposition, suppressing *que*.

13. Point out the two most striking inversions.

Translate :

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University of Toronto.

ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

GERMAN.

Examiners: { JAMES FORNERI, LL.D.
ROBERT SULLIVAN, M. A.

I.

Translate :

Einer oder der Andere.

Zur Zeit Heinrich's IV., Königs von Frankreich, ritt einmal ein Bäuerlein von seinem Dorfe nach Paris. Nicht mehr weit von der Stadt begegnete er einem stattlichen Reiter. Es war der König. Sein Gefolge war absichtlich in einiger Entfernung geblieben. „Woher des Wegs, mein Freund? „Habt ihr Geschäfte zu Paris?"

„Ja," antwortete der Bauer; „auch möchte ich gern einmal unsern guten König sehen, der sein Volk so zärtlich liebt."

Der König lächelte und sagte: „Dazu kann euch Rath werden."

"Aber wenn ich nur wüßte, welcher es ist unter den vielen Höflingen, von denen er umgeben sein wird."

„Das will ich euch sagen: Ihr dürft nur Achtung geben, welcher den Hut auf dem Kopfe behalten wird, wann alle alle Andern sich ehrerbietig werden entblößt haben."

Also ritten sie mit einander in Paris hinein, und zwar das Bäuerlein auf der rechten Seite des Königs; denn was die liebe Einfalt, es sei mit Absicht oder durch Zufall, Ungeschicktes thun kann, das thut sie.

ADLER, p. 46.

1. *Königs von Frankreich.* In what relation?

2. *Ritt einmal.* Give the infinitive and participle past of *ritt.*

3. *Ein Bäuerlein.* What do *chen* and *lein* denote at the end of a noun; and why is *lein* here employed?

4. *Begegnete er.* Give the antecedent of *er.*

5. *Einem stattlichen Reiter..* What case and why?

6. *Geblieben.* Give the infinitive and imperfect.

   Woher des Wegs. Fill up the ellipsis.

7. *Dazu kann euch Rath werden.* What is the subject of *kann*? Give the force.

8. *Aber wenn ich nur wüsste.* Give the infinitive and participle past of *wüsste.*

9. *Welcher es ist.* Give the various constructions of *es.*

10. *Ihr dürft.* Give the infinitive of *dürft*, imperfect and participle past.

11. *Denn was.* Set all this sentence in a regular construction, taking in *zwar*, and making it emphatic.

12. *Die liebe Einfalt.* What is *liebe*, what is its meaning, and in what sense is it here employed?

13. *Ungeschicktes.* Turn it into a relative sentence.

II.

GRAMMATICAL QUESTIONS.

1. When is *of* omitted, and by what preposition is it rendered when expressing locality or tendency?

2. What preposition do adjectives take referring only to a part of the whole? Translate, *the bird has beautiful feathers.*

3. When a relative pronoun refers to a whole sentence, what gender does it take?

4. What is the peculiarity of *zu* after the verb *to be?*

5. How is the English participle present rendered after the word *kommen?*

6. Name some verbs which require the genitive case, and some which govern two accusatives.

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7. By what verb is rendered *to be* before an infinitive ?

8. What participles past are turned into infinitive when they govern an infinitive ?

9. By what verb is *would* rendered in the sense of *used* ? Translate *thus he would sit and talk for hours.*

10. What case does the impersonal *geben* govern ? and when is the participle past *worden* and when *geworden* used ?

11. When are *über durch wieder um* separable and when inseparable ? and what verbs must take an impersonal form in their passive voice ?

III.

HISTORY OF GERMAN LITERATURE, PERIODS 1, 2, 3, AND 4, (GOSTICK'S)

1. Why did Ulphilas in his translation of the Scriptures into the Gothic language omit the book of Kings ?

2. What remains now of this translation ?

3. What do you perceive in the work of Ulphilas with regard to the German tongue ?

4. Give the character of the German language.

5. What does the 1st period comprehend, and how far does it extend ?

6. How far does the 2nd period extend, and what does it contain ?

7. What title can you give to the 4th period, and how far does it extend ?

8. What character did Luther impress on the literature of the 16th century ?

9. How far is Germany indebted to Luther with regard to the German tongue ?

10. What difference can you draw between the literature of the north and that of the south of Germany ?

Tranglate :
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Aber mich b
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University of Toronto.

ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

GERMAN.

HONORS AND SCHOLARSHIPS.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.

Tranglate into German.

Two boys went together, one winter morning, on a pond which was frozen. Many people were skating on the ice. At the end of the pond there was a place where the ice did not bear. Every body stood aloof from this place in order not to be drowned. Charles and William (these were the names of the two boys) were scarcely on the ice when they hastened to slide. By degrees W. always came nearer the dangerous spot; he was too thoughtless to observe it. Suddenly the ice breaks under him; Charles flies to his assistance; he too breaks in, and both are drowned—the former in consequence of his thoughtlessness, the latter out of love for his friend.

II.

Als mich das Mädchen erblickte, so trat sie den Pferden gelassen
Näher und sagte zu mir: Nicht immer war es mit uns so
Jammervoll, als Ihr uns heut' anf diesen Wegen erblicket.
Noch nicht bin ich gewohnt, vom Fremden die Gabe zu heischen,
Die er oft ungern giebt, um los zu werden den Armen;
Aber mich dränget die Noth zu reden. Hier auf dem Strohe
Liegt die erst entbundene Frau des reichen Besitzers,

Die ich mit Stieren und Wagen noch kaum, die schwangre, gerettet.
Spät nur kommen wir nach, und kaum das Leben erhielt sie.
Nun liegt, neugeboren, das Kind ihr nackend im Arme,
Und mit Wenigem nur vermögen die Unsern zu helfen!
Wenn wir im nächsten Dorf, wo wir heute zu rasten gedenken,
Auch sie finden, wiewohl ich fürchte, sie sind schon vorüber.
Wär Euch irgend von Leinwand nur was Entbehrliches, wenn Ihr
Hier aus der Nachbarschaft seyd, so spendet's gütig den Armen.

GOETHE'S *Herman und Dorothea*, pages 16 & 17.

1. *So trat sie.* Explain the discordance of *sie.*

2. *Den Pferden.* What case, and why?

3. *Gelassen.* What is it?

4. *Nicht immer so jammervoll.* Give the force.

5. *Als Ihr.* What difference in meaning between *Ihr* and *ihr?*

6. *Die er oft ungern giebt.* Give the antecedents of *die* and *er;* and state what case *geben,* when impersonal, governs.

7. *Um los zu werden.* Give the force of *los zu werden;* and state what cases it governs.

8. *Den Armen.* What case, and why so? Would *des Armen,* or *der Armen* be good German? Why spelt with a capital?

9. *Aber mich dränget die Noth.* Why the subject after the verb?

10. *Hier auf dem Strohe liegt,* &c. Why *auf* with the dative here?

11. *Die erst entbundene Frau.* Give the force of *erst* and turn *entbundene Frau* into a relative sentence.

12. *Die schwangre gerettet.* With what word, and in what relation does *die schwangre* stand? Fill up the ellipsis.

13. *Spät nur kommen wir nach.* What is *nach* here?

14. *Das Leben erhielt sie.* Give the antecedent of *sie;* and point out the subject of *erhielt.*

15. *Ihr......im Arme.* Explain the rule affecting these words.

16. *Liegt neugeboren, das Kind......nackend, &c.* Turn *neugeboren* and *nackend* into adjectives, qualifying *das kind*, and re-arrange the words.

17. *Die Unsern.* Who are they?

18. *Wenn wir, &c.* Suppress *wenn*, and re-arrange the sentence.

19. *Schon Vorüber.* Fill up the ellipsis.

20. *Wär' euch, &c,* Prefix *wenn*, and re-arrange; but turn *wär* into an active verb, with *euch* as a subject.

21. *Was Entbehrliches.* What does *was* stand for? Turn *Entbehrliches* into a relative sentence, and state by what is *von Leinwand* governed.

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University of Toronto.

SECOND YEAR.

EXPERIMENTAL CHEMISTRY.

Examiner: HENRY CROFT, D.C.L.

1. Describe the construction of a mercurial thermometer. What is its range?

2. By what means may the conducting power of bodies be determined?

3. How may the radiation of heat be proved?

4. What is meant by a magnetic meridian?

5. Describe a galvanometer and its action.

6. Describe the different frictional electrical machines.

7. Give the preparation of ozone, iodine, bromine, chloric acid and hydrofluoric acid, with their general properties.

8. Give the principal ores of silver, arsenic, mercury, copper and platinum, and the formulas of their oxides.

9. Give the general principles of organic analysis, and the general composition of natural organic bodies.

10. Give the preparation, properties and formulas of acetic acid, cyanide and ferrocyanide of ·potassium and fulminating mercury.

EXPERIMENTAL CHEMISTRY.
HONORS AND SCHOLARSHIPS.

Examiner: HENRY CROFT, D.C.L.

1. Describe the principles and construction of the compensating pendulum, and of Breguet's thermometer.

2. What is meant by thermometric equilibrium? and explain the so-called radiation of cold.

3. What is the law of the diffusion of gases? How ascertained?

4. Mention the relative powers of lamp black and polished silver as regards absorption, radiation and reflection of heat.

5. What is meant by the magnetic equator, and by isoclinal lines.

6. Describe an induction coil, and explain the effect of introducing a coil of wire into the circuit of a weak battery.

7. Explain the action of a Leyden jar, and show how several can be charged at once.

8. Give the preparation of protoxide and binoxide of nitrogen, phosphuretted hydrogen olefiant gas and terchloride of silicon.

9. Give the preparation of arsenic acid, chromic acid, permanganate of potassa, binoxide of tin, and corrosive sublimate.

10. Give the sources and preparation of light carburetted hydrogen, methylic and cetylic alcohols, formic and palmitic acids.

11. Give the sources and preparation of benzole, and mention the substances obtained from it by the action of nitric acid, giving formulas.

12. In what substances are fibrine, albumine and caseine found? What are their characters.

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

MINERALOGY AND GEOLOGY.

Examiner: T. STERRY HUNT, M.A., F.R.S.

1. Explain briefly the scale of hardness, and give the hardness of albite, of epidote, and of galena on the scale of Mohs.

2. By what chemical and physical characters would you distinguish fluor-spar from apatite?

3. Give the mineralogical characters and composition of the constituent minerals of syenite.

4. Describe the four most important ores of iron.

5. Describe the sulphuretted ores of copper, and their composition.

6. Name the mineral species corresponding to the following characters:

   (a) Vitreous lustre; hardness 7, gravity 3.35, color pale green; monoclinic.
   (b) Vitreous lustre; hardness 4, gravity 3.16, color yellow; monometric.
   (c) Metallic lustre; hardness 3, gravity 11.10, color white; monometric.

7. Mention some of the characteristic genera of the animals in the Devonian period.

8. B
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8. By what marks may deep-water deposits be distinguished from those of shallow seas ?

9. Give the sub-divisions of the tertiary system in Europe, and Lyell's names for them.

10. Explain what is meant by unconformable stratification.

11. Mention the prominent facts in the history of fossil fishes.

12. Describe common and magnesian limestones, and give some of the peculiar characters of the latter.
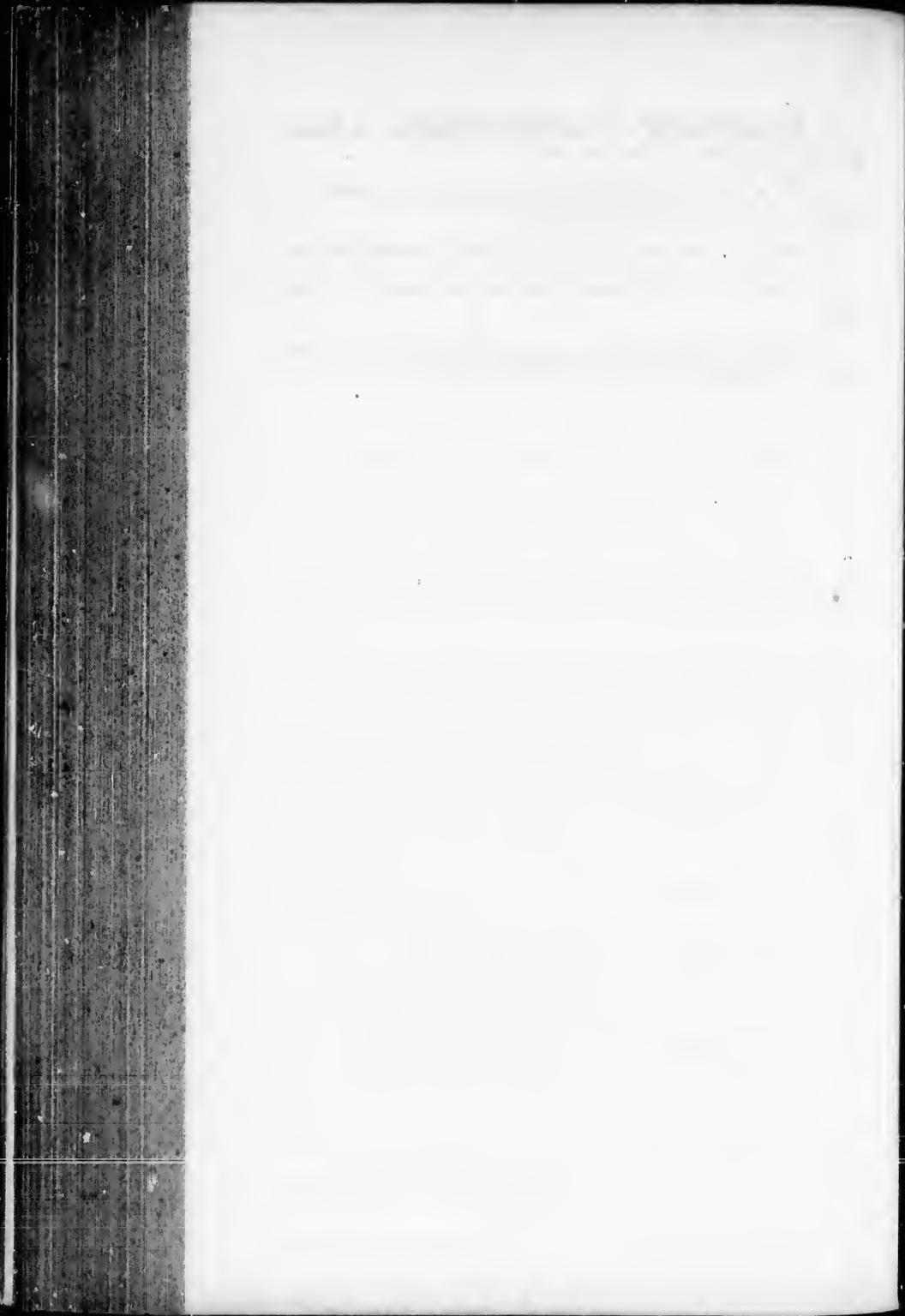
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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

GEOLOGY AND MINERALOGY.

HONORS.

Examiner: T. STERRY HUNT, M.A., F.R.S.

1. Explain what is meant by hemihedrism, and illustrate it by monometric and hexagonal forms.

2. Describe the cleavages of calcite, and those of chlorite, and show how they are in both cases related to the hexagonal prism.

3. What are the chemical and mineralogical differences between hornblende and pyroxene?

4. What are the principal silicious minerals found in granitic veins?

5. Describe the mineralogical differences of arragonite and calcite, and give other examples of dimorphism.

6. In what formations does coal occur, and what are the conditions of its production?

7. What are the principal genera of crustaceans and brachiopods in the Lower Silurian rocks?

8. What are most remarkable geological and mineralogical characters of the Salt-bearing rocks.

9. What are the differences between granite, trachyte, and and gneiss, and what their geological relations ?

10. State the principal phenomena presented by volcanic mountains.

METAPHYSICS AND ETHICS.

Examiner: REV. PROFESSOR MURRAY.

WAYLAND AND LOCKE.

1.   *a.*   In what two senses may the term *law* be employed?

      b.   In which of these is it employed in ethics?

2. How would you prove that our notion of the moral quality of actions is derived neither (*a*) from an act of judgment, nor (*b*) from association, nor (*c*) from the idea of the greatest amount of happiness?

3. What answer would you give to the arguments against the existence of a moral faculty, founded on the difference in the moral judgment of the different nations?

4.   *a.*   What is meant by *self-love*, and what is the rank which it holds in relation to *passion* on the one hand and to *conscience* oh the other?

5.   *a.*   What are the two general divisions under which the duties to man are arranged by Wayland?

      b.   What are the main classes into which these general divisions are subdivided?

6. In what sense is the word *idea* used by Locke?

7.   *a.* From what two sources does Locke derive all our ideas?

b. Which of these does he regard as the source of our first ideas?

8. *a.* What does Locke mean by a *simple*, what by a *complex* idea?

b. Mention some of the simple ideas which he derives in the first place from each of the sources separately, and in the second from both conjointly.

9. How does Locke explain the origin of our ideas (*a*) of space and (*b*) of time?

10. State and criticise Locke's account of what constitutes personal identity?

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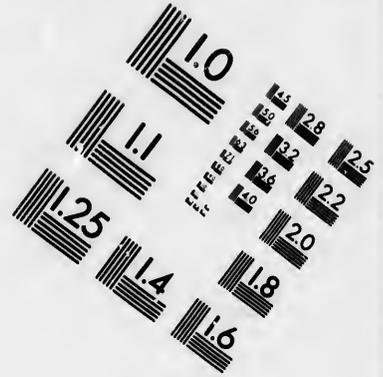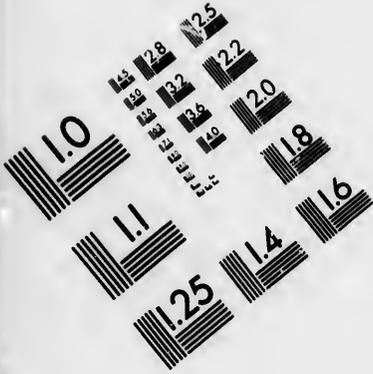
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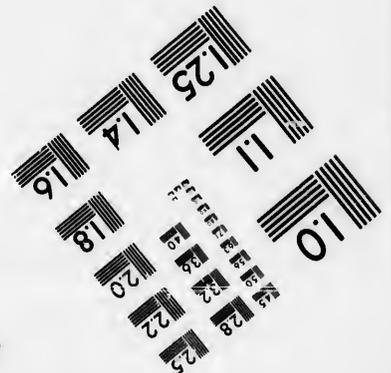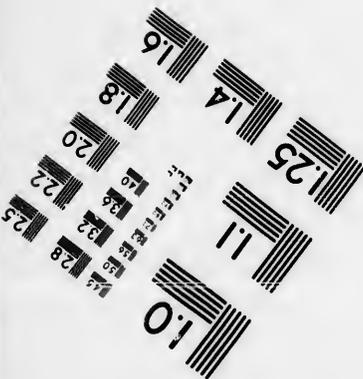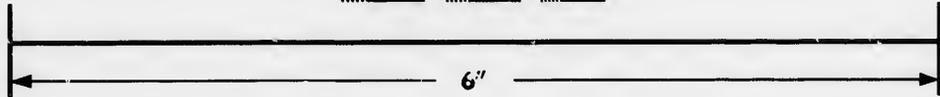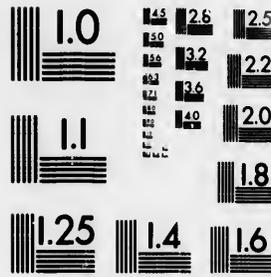
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ANNUAL EXAMINATIONS : 1864.

SECOND YEAR.

MURRAY'S LOGIC.

Examiner: REV. PROFESSOR MURRAY.

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1. *a.* Explain the five predicables.

   b. Illustrate the five predicables, by giving an example of each as a predicate to the subject *horse*.

2. *a.* What is meant by the *quantity*, what by the *quality* of a proposition ?

   b. How many species of propositions are there, divided according to both quantity and quality ?

   c. By what symbols are these species severally denoted ?

3. *a.* What is meant by the *conversion* of a proposition ?

   b. Explain the three modes of conversion.

   c. Convert the following propositions, and state by which of the three modes each is converted.

   All negative propositions distribute to the predicate.

   No affirmative propositions distribute the predicate.

   Some propositions are true.

   Some propositions are not true.

4. *a.* What is the difference between the opposition of *contradictories* and that of *contraries ?*

   b. Of A, E, I, O, state which are contraries, which contradictories ?

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5. *a.* What constitutes the *figure* of a syllogism?

  b. How many figures are there, and by what are they distinguished from each other?

6. Why are (*a*) only negative conclusions possible in the second figure, (*b*) only particular conclusions in the third?

7. In hypothetical syllogisms what are the two legitimate, what the two illegitimate modes of drawing a conclusion?

8. State to which of the figures *Camestres*, *Festino*, *Disamis*, *Bramantip* belong, and explain the meaning of their symbolic letters.

9. Throw into *Felapton* the following argument, and reduce it to its corresponding mood of the first figure: "Some animals have not the power of locomotion, for sponges are animals."

10. Name and point out the fallacy of the following arguments:

  a. Whatever is universally believed is true.
  The existence of God is not universally believed;
  Therefore it is not true.

  b. What one troweth is not eternal and unchangeable;
  Truth is what one troweth;
  Therefore truth is not eternal and unchangeable.

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

METAPHYSICS AND ETHICS.

HONORS AND SCHOLARSHIPS.

Examiner: REV. PROFESSOR MURRAY.

1. *a.* What was the earliest school of philosophy in Greece?

   b. What is the problem with which the speculations of that school began?

   c. What is common to all their solutions of that problem?

2. *a.* State the main principle of the Eleatics, and point out its antagonism to the earliest philosophy of Greece?

   b. What philosopher of the Eleatic school was celebrated for his demonstration of the impossibility of motion?

3. *a.* What are the three parts into which Epicurus divided philosophy?

   b. Explain the relation in which he placed these to each other.

4. *a.* Into what two schools is the *Academy* usually divided?

   b. By what character was the later school distinguished?

5. *a.*

   b.

6. Wl
scepticis

7. Wl
be accep

8. Wh
(*pensée,*

9. *a.*

   b.

10. *a.*

    b.

5. *a.* What was the other Platonic school, which arose in Alexandria?

    b. What were the general tendency of its speculations, and the influences by which that tendency was determined?

6. What is the difference between Cartesian doubt and scepticism?

7. What is the fact which, according to Descartes, must be accepted in doubting every other?

8. What is the sense in which Descartes uses *cogitatio* (*pensée, thought*)?

9. *a.* On what ground does Descartes deem it necessary to prove the existence of God in order to the possibility of being certain with regard to anything else?

    b. State explicitly any of his arguments for the existence of God.

10. *a.* What does Descartes regard as constituting the *essence* of mind and that of matter respectively?

    b. On what does he found his belief in the existence of material things?

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4.   *a*

    b

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SECOND YEAR.

LOGIC.

HONORS AND SCHOLARSHIPS.

Examiner: Rev. Professor Murray.

1. What is meant by the *extension*, what by the *intension* of a conception; and what is the law of their relation?

2. What are the two logical processes by which the extension and intension of a conception are severally resolved?

3. Into what classes are judgments divided (a) as to *quantity*, (b) as to *quality*, (c) as to *relation*?

4.   *a.*   What are the six classes of judgments recognised by Thompson?

    b.   In what respects does this classification of judgments differ from that of the older logicians?

    c.   What are the two judgments recognised by Hamilton in addition to those of Thomson?

    d.   On what grounds does Thomson reject these two additional judgments?

5. Explain the judgment, *man is mortal,* according to its (a) extension, (b) intension and (c) denomination.

6. On what ground is the fourth figure of the syllogism rejected by Thomson, as only an indirect mode of the first?

Translate

Μὲ
πᾶσα
μετὰ
κακότ
ἱρὰ, π
ζεσθα
ἀποδε
οὔρεῖ,
περαι
ἑτέροι
μενον
μυριά
δὲ ἐγγ
κατὰ
πολλο
γὰρ μ
ὕψος
λίθου
δέκα ἐ
αἱ πυρ
ἑωυτᾷ
π ραμ

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GREEK.

THIRD YEAR.

Examiners : { Rev. John McCaul, LL.D.
Thos. Moss, M.A.

I.

Translate :

Μέχρι μέν νυν Ῥαμψινίτου βασιλέος εἶναι ἐν Αἰγύπτῳ
πᾶσαν εὐνομίην ἔλεγον, καὶ εὐθηνέειν Αἴγυπτον μεγάλως·
μετὰ δὲ τοῦτον, βασιλεύσαντά σφεων Χέοπα, ἐς πᾶσαν
κακότητα ἐλάσαι. κατακληΐσαντα γάρ μιν πάντα τὰ
ἱρὰ, πρῶτα μέν σφεας θυσιέων ἀπέρξαι· μετὰ δὲ, ἐργά-
ζεσθαι ἑωυτῷ κελεύειν πάντας Αἰγυπτίους. τοῖσι μὲν δὴ
ἀποδεδέχθαι, ἐκ τῶν λιθοτομιέων τῶν ἐν τῷ Ἀραβίῳ
οὔρεϊ, ἐκ τουτέων ἕλκειν λίθους μέχρι τοῦ Νείλου· δια-
περαιωθέντας δὲ τὸν ποταμὸν πλοίοισι τοὺς λίθους
ἑτέροισι ἔταξε ἐκδέκεσθαι, καὶ πρὸς τὸ Λιβυκὸν καλεύ-
μενον ὄρος, πρὸς τοῦτο ἕλκειν. ἐργάζοντο δὲ κατὰ δέκα
μυριάδας ἀνθρώπων αἰεὶ τὴν τρίμηνον ἑκάστην. χρόνον
δὲ ἐγγενέσθαι τριβομένῳ τῷ λαῷ, δέκα μὲν ἔτεα τῆς ὁδοῦ
κατὰ τὴν εἷλκον τοὺς λίθους, τὴν ἔδειμαν· ἔργον ἐὸν οὐ
πολλῷ τέῳ ἔλασσον τῆς πυραμίδος, ὡς ἐμοὶ δοκέειν (τῆς
γὰρ μῆκος μέν εἰσι πέντε στάδιοι· εὖρος δὲ, δέκα ὀργυιαί·
ὕψος δὲ, τῇ ὑψηλοτάτη ἐστὶ αὐτὴ ἑωυτῆς, ὀκτὼ ὀργυιαί·
λίθου τε ξεστοῦ καὶ ζώων ἐγγεγλυμμένων) ταύτη τε δὴ τὰ
δέκα ἔτεα γενέσθαι, καὶ τῶν ἐπὶ τοῦ λόφου, ἐπ' οὗ ἑστᾶσι
αἱ πυραμίδες, τῶν ὑπὸ γῆν οἰκημάτων, τὰς ἐποιέετο θήκας
ἑωυτῷ ἐν νήσῳ, διώρυχα τοῦ Νείλου ἐσαγαγών. τῇ δὲ
πυραμίδι αὐτῇ χρόνον γενέσθαι εείκοσι ἔτεα ποιευμένῃ·

τῆς ἐστι πανταχῇ μέτωπον ἕκαστον ὀκτὼ πλέθρα, ἐούσης τετραγώνου, καὶ ὕψος ἴσον· λίθου δὲ ξεστοῦ τε καὶ ἁρμοσμένου τὰ μάλιστα· οὐδεὶς τῶν λίθων τριήκοντα ποδῶν ἐλάσσων.

<div style="text-align: right;">HERODOTUS, B. II., c. 124.</div>

1. Give the Attic for the Ionic forms in this extract.

2. κατὰ δέκα μυριάδας. Explain this use of κατὰ, and give other examples.

3. χρόνονδὲ τὸ ἔδειμαν. Translate literally and explain the construction.

4. ὡς ἐμοὶ δοκέειν. What is the construction?

5. στάδιοι, ὀργυιαί, πλέθρα. Explain these measures.

6, τῇ ὑψηλοτάτῃ ἐστὶ αὐτὴ ἑωυτῆς. What is the construction?

7. Whence did Herodotus obtain his information relative to Egypt? At what time was he there?

8. What other ancient authorities for its history?

9. Give instances of the confirmation or correction of the statements of Herodotus by modern investigations.

10. Point out peculiarities of the dialect of Herodotus, as regards apostrophe, crasis, the rough breathing, the augment, and the difference of vowels and consonants.

<div style="text-align: center;">II.</div>

Translate :

OI. κοὐ μὴ στερηθῇς γ' ἐς τοσοῦτον ἐλπίδων
ἐμοῦ βεβῶτος. τῷ γὰρ ἂν καὶ μείζονι
λέξαιμ' ἂν ἢ σοὶ διὰ τύχης τοιᾶσδ' ἰών;
ἐμοὶ πατὴρ μὲν Πόλυβος ἦν Κορίνθιος,
μήτηρ δὲ Μερόπη Δωρίς· ἠγόμην δ' ἀνὴρ
ἀστῶν μέγιστος τῶν ἐκεῖ, πρίν μοι τύχη
τοιάδ' ἐπέστη, θαυμάσαι μὲν ἀξία,
σπουδῆς γε μέντοι τῆς ἐμῆς οὐκ ἀξία.
ἀνὴρ γὰρ ἐν δείπνοις μ' ὑπερπλησθεὶς μέθῃ
καλεῖ παρ' οἴνῳ, πλαστὸς ὡς εἴην πατρί.
κἀγὼ βαρυνθεὶς τὴν μὲν οὖσαν ἡμέραν
μόλις κατέσχον· θἀτέρᾳ δ' ἰὼν πέλας
μητρὸς πατρός τ' ἤλεγχον· οἱ δὲ δυσφόρως
τοὔνειδος ἦγον τῷ μεθέντι τὸν λόγον.

<div style="text-align: right;">SOPHOCLES, Œdipus Rex, vv. 771-784.</div>

1. Give a scale of the metre.

2. ἐλπίδων. Why in genitive?

3. τῷ γὰρ ἂν καὶ μείζονι. Explain. θἀτέρᾳ. What crasis?

4. οἱ δὲ δυσφόρως to λόγον. What is the construction?

5. Give a list of Greek Tragic authors, introducing dates
where you can.

III.

Translate :

> δεινὸν δ' ἀύσας, ὡς ὑφηγητοῦ τινὸς,
> πύλαις διπλαῖς ἐνήλατ᾿· ἐκ δὲ πυθμένων
> ἔκλινε κοῖλα κλῆθρα, κἀμπίπτει στέγῃ.
> οὗ δὴ κρεμαστὴν τὴν γυναῖκ᾿ ἐσείδομεν,
> πλεκταῖς ἐώραις ἐμπεπλεγμένην. ὁ δὲ
> ὅπως ὁρᾷ νιν, δεινὰ βρυχηθεὶς τάλας,
> χαλᾷ κρεμαστὴν ἀρτάνην. ἐπεὶ δὲ γῇ
> ἔκειτο τλήμων, δεινὰ δ' ἦν τἀνθένδ᾿ ὁρᾶν.
> ἀποσπάσας γὰρ εἱμάτων χρυσηλάτους
> περόνας ἀπ᾿ αὐτῆς, αἷσιν ἐξεστέλλετο,
> ἄρας ἔπαισεν ἄρθρα τῶν αὑτοῦ κύκλων,
> αὐδῶν τοιαῦθ᾿, ὁθούνεκ᾿ οὐκ ὄψοιντό νιν
> οὔθ᾿ οἷ ἔπασχεν οὔθ᾿ ὁποῖ᾿ ἔδρα κακά,
> ἀλλ᾿ ἐν σκότῳ τὸ λοιπὸν οὓς μὲν οὐκ ἔδει
> ὀψοίαθ᾿, οὓς δ᾿ ἔχρῃζεν οὐ γνωσοίατο.
> τοιαῦτ᾿ ἐφυμνῶν πολλάκις τε κοὐχ ἅπαξ
> ἤρασσ᾿ ἐπαίρων βλέφαρα. φοίνιαι δ᾿ ὁμοῦ
> γλῆναι γένει᾿ ἔτεγγον, οὐδ᾿ ἀνίεσαν
> φόνου μυδώσας σταγόνας, ἀλλ᾿ ὁμοῦ μέλας
> ὄμβρος χάλαζά θ᾿ αἱματοῦσσ᾿ ἐτέγγετο.

SOPHOCLES, *Œdipus Rex*, vv. 1260-1279.

1. διπλαῖς. What is the meaning? Περόνας. What?

2. ὁθούνεκ᾿ to γνωσοίατο. Translate literally and explain
the meaning.

3. v. 1279. Give an account of this reading.

4. Give scales of Tragic Trochaics, and Anapæstics.

5. Describe the places set apart in the theatres for the
actors, chorus, and audience, and give their designations in
Greek.

Demitt
Quum
"Si be
Non Va
Aut cit
Mollius
Interpe
Cognat
Omnes
Confice
Quod p
Hunc r
Nec la
Garrul
Si sapi
Ventur
Præter
Debeb
"Si me
Aut va
Et pro
"Tene

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THIRD YEAR.

LATIN.

Examiners: { Rev. John McCaul, LL.D.
{ Thomas Moss, M.A.

I.

Translate:

Demitto auriculas, ut iniquæ mentis asellus,
Quum gravius dorso subiit onus.   Incipit ille:
"Si bene me novi, non Viscum pluris amicum,
Non Varium facies ; nam quis me scribere plures
Aut citius possit versus? quis membra movere
Mollius? Invideat quod et Hermogenes, ego canto."
Interpellandi locus hic erat: "Est tibi mater,
Cognati, quis te salvo est opus?"—"Haud mihi quisquam.
Omnes composui."—"Felices! nunc ego resto.
Confice ; namque instat fatum mihi triste, Sabella
Quod puero cecinit divina mota anus urna:
Hunc neque dira venena nec hosticus auferet ensis
Nec laterum dolor aut tussis nec tarda podagra ;
Garrulus hunc quando consumet cunque ; loquaces,
Si sapiat, vitet, simul atque adoleverit ætas."
Ventum erat ad Vestæ, quarta jam parte diei
Præterita ; et casu tunc respondere vadato
Debebat, quod ni fecisset, perdere litem.
"Si me amas," inquit, "paullum hic ades." "Interéam, si
Aut valeo stare aut novi civilia jura ;
Et propero quo scis." "Dubius sum, quid faciam," inquit,
"Tene relinquam, an rem."   "Me, sodes."

HORACE, *Sat.* I., 9, vv. 20-41.

1. *Quum gravius dorso subiit onus.*   Give the construction.

2. *Membra movere.*   Give different explanations.

3. *Invideat quod, &c.*   What is the construction of *quod?*

4. *Quarta jam parte, &c.*   What hour of the day?

5. *Casu.*   Give different explanations.

6. Notice any metrical peculiarities in the passage.

7. *Sodes.*   Whence derived?

8. Distinguish between *agnati* and *cognati*, *dolor* and *luctus*, *perdere* and *amittere*, *amare* and *diligere*, *properare* and *festinare*.

II.

Translate :

Quis tamen exiguos elegos emiserit auctor,
Grammatici certant et adhuc sub judice lis est.
Archilochum proprio rabies armavit iambo ;
Hunc socci cepere pedem grandesque cothurni,
Alternis aptum sermonibus et populares
Vincentem strepitus et natum rebus agendis.
Musa dedit fidibus divos puerosque Deorum,
Et pugilem victorem et equum certamine primum
Et juvenum curas et libera vina referre.
Descriptas servare vices operumque colores
Cur ego si nequeo ignoroque poeta salutor ?
Cur nescire pudens prave quam discere malo ?
Versibus exponi tragicis res comica non vult ;
Indignatur item privatis ac prope socco
Dignis carminibus narrari coena Thyestæ.
Singula quæque locum teneant sortita decenter.
Interdum tamen et vocem comœdia tollit,
Iratusque Chremes tumido delitigat ore ;
Et tragicus plerumque dolet sermone pedestri
Telephus et Peleus, quum pauper et exsul uterque
Projicit ampullas et sesquipedalia verba,
Si curat cor spectantis tetigisse querela.

HORACE, *Ad Pisones*, vv. 77-98.

1. *Exiguos.*   Discuss the meaning of this epithet.

2. *Auctor.*   Mention different poets to whom the invention has been ascribed.

3. *Proprio.* Give different explanations.

4. *Socci——cothurni.* what do they respectively refer?

5. *Populares vincentem strepitus.* Explain.

6. *Natum rebus.* Cite other instances of the use of *natus* in this sense.

7. *Nequeo ignoroque.* Give the force of each.

8. *Cœna Thyestæ.* To what particular play has this been supposed to refer?

9. *Sesquipedalia.* Give the derivation.

10. Distinguish between Greek *satyra* and Roman *satira*.

III.

Translate :

Veiis interim non animi tantum in dies sed etiam vires crescebant nec Romanis eo convenientibus ex agris, qui aut prœlio adverso aut clade captæ urbis palati fuerant, sed etiam ex Latio voluntariis confluentibus, ut in parte prædæ essent. Maturum jam videbatur repeti patriam eripique ex hostium manibus, sed corpori valido caput deerat. Locus ipse admonebat Camilli, et magna pars militum erat qui ductu auspicioque ejus res prospere gesserant: et Cædicius negare se commissurum, cur sibi aut deorum aut hominum quisquam imperium finiret potius, quam ipse memor ordinis sui posceret imperatorem. Consensu omnium placui. ab Ardea Camillum acciri, sed antea consulto senatu qui Romæ esset: adeo regebat omnia pudor, discriminaque rerum prope perditis rebus servabant. Ingenti periculo transeundum per hostium custodias erat: ad eam rem Pontius Cominius impiger juvenis operam pollicitus incubans cortici secundo Tiberi ad urbem defertur: inde, qua proximum fuit a ripa, per præruptum eoque neglectum hostium custodiæ saxum in Capitolium evadit, et ad magistratus ductus mandata exercitus edit.

LIVY, V., ch. 46.

1. Give derivations of *maturus, auspicium, polliceor,* and *secundus.*

2. *Et Cædicius negare se, &c.* Turn this into direct narration.

3. *Senatus.* Trace the changes in the constitution of the Senate.

4. *Consultum.* What was the difference between *senatus consultum* and *decretum plebis?*

5. *Pontius Cominius.* Why do some editors read Cominus?

6. Explain the Roman system of naming. How was the circumstance of *adoption* denoted?

7. What defects have been attributed to Livy as a historian?

8. What is meant by Patavinitas?

P

ΧΟ. στέν
δακρυσίστ

    ἀμέγα
    ὑπερι
    πρόπ
    μεγαλ

    ὁπόσι
    μεγαλ

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ischiorrhog

University of Toronto.

THIRD YEAR.

GREEK.
HONORS.

Examiners: } Rev. John McCaul, LL.D.
Thomas Moss, M.A.

I.

ΧΟ. στένω σε τᾶς οὐλομένας τύχας, Προμηθεῦ. στρ. ά·
δακρυσίστακτον ἀπ᾽ ὄσσων ῥαδινῶν [δ᾽ εἰβομένα] ῥέος παρειὰν
νοτίοις ἔτεγξα παγαῖς·
ἀμέγαρτα γὰρ τάδε. Ζεὺς δ᾽ ἰδίοις νόμοις κρατύνων
ὑπερήφανον θεοῖς τοῖς πάρος ἐνδείκνυσιν αἰχμάν.
πρόπασα δ᾽ ἤδη στονόεν λέλακε χώρα, ἀντ. ά.
μεγαλοσχήμονά τ᾽ ἀρχαιοπρεπῆ [δακρυκχέει] στένουσα
τὰν σὰν
ξυνομαιμόνων τε τιμάν,
ὁπόσοι τ᾽ ἔποικον ἁγνᾶς Ἀσίας ἕδος νέμονται,
μεγαλοστόνοισι σοῖς πήμασι συγκάμνουσι θνατοί.

Æschylus, *Prometheus Vinctus*, vv. 405-421.

1. Give the different readings and translate accordingly.

2. Arrange this strophe and antistrophe, so that all the verses except the last, shall be dimeters, and scan according to both arrangements. What readings and arrangement do you prefer, and why?

3. Give scales of Glyconics Antispastic and Choriambic.

4. Explain the meaning of *scazon, meiurus, anaclomenus, ischiorrhogic.*

5. How many actors were employed in the performance of this Tragedy? Explain your answer.

6. Give an account of the duties of the *choragus*, the author, and the judges in dramatic contests.

II.

Translate :

πέμπτη δ' ἀπ' αὐτοῦ γέννα πεντηκοντάπαις
πάλιν πρὸς Ἄργος οὐχ ἑκοῦσ' ἐλεύσεται
θηλύσπορος, φεύγουσα συγγενῆ γάμον
ἀνεψιῶν· οἱ δ' ἐπτοημένοι φρένας,
κίρκοι πελειῶν οὐ μακρὰν λελειμμένοι,
ἥξουσι θηρεύσοντες οὐ θηρασίμους
γάμους, φθόνον δὲ σωμάτων ἕξει θεός·
Πελασγία δὲ δέξεται, θηλυκτόνῳ
Ἄρει δαμέντων νυκτιφρουρήτῳ θράσει·
γυνὴ γὰρ ἄνδρ' ἕκαστον αἰῶνος στερεῖ,
δίθηκτον ἐν σφαγαῖσι βάψασα ξίφος.
τοιάδ' ἐπ' ἐχθροὺς τοὺς ἐμοὺς ἔλθοι Κύπρις.
μίαν δὲ παίδων ἵμερος θέλξει τὸ μὴ
κτεῖναι ξύνευνον, ἀλλ' ἀπαμβλυνθήσεται
γνώμην· δυοῖν δὲ θάτερον βουλήσεται,
κλύειν ἄναλκις μᾶλλον ἢ μιαιφόνος·
αὕτη κατ' Ἄργος βασιλικὸν τέξει γένος—
μακροῦ λόγου δεῖ ταῦτ' ἐπεξελθεῖν τορῶς·—
σπορᾶς γε μὴν ἐκ τῆσδε φύσεται θρασύς,
τόξοισι κλεινός, ὃς πόνων ἐκ τῶνδ' ἐμὲ
λύσει. τοιόνδε χρησμὸν ἡ πάλαιγενὴς
μήτηρ ἐμοὶ διῆλθε Τιτανὶς Θέμις·
ὅπως δὲ χὤπη, ταῦτα δεῖ μακροῦ λόγου
εἰπεῖν, σύ τ' οὐδὲν ἐκμαθοῦσα κερδανεῖς.

ÆSCHYLUS, *Prometheus Vinctus*, vv. 872-897.

1. πέμπτη γέννα. Explain.

2. θηλυκτόνῳ to θράσει. Give different readings and translate accordingly.

3. μίαν. Give the name, and cite the illustrative passages from Horace and Ovid.

4. κλύειν. In what sense? Give similar examples in Latin and English.

5. σπορᾶς ἐκ τῆσδε. Trace this genealogy.

6. Explain the principles of the Porsonian canons relative to the third, fourth and fifth feet.

III.

Translate :

Τὸ μὲν μὴ ἀγανακτεῖν, ὦ ἄνδρες Ἀθηναῖοι, ἐπὶ τούτῳ
τῷ γεγονότι, ὅτι μου κατεψηφίσασθε, ἄλλα τέ μοι πολλὰ
ξυμβάλλεται, καὶ οὐκ ἀνέλπιστόν μοι γέγονε τὸ γεγονὸς
τοῦτο, ἀλλὰ πολὺ μᾶλλον θαυμάζω ἑκατέρων τῶν ψήφων
τὸν γεγονότα ἀριθμόν. οὐ γὰρ ᾤμην ἔγωγε οὕτω παρ᾽
ὀλίγον ἔσεσθαι, ἀλλὰ παρὰ πολύ. νῦν δέ, ὡς ἔοικεν, εἰ
τρεῖς μόναι μετέπεσον τῶν ψήφων, ἀποπεφεύγη ἄν. Μέ-
λητον μὲν οὖν, ὡς ἐμοὶ δοκῶ, καὶ νῦν ἀποπέφευγα. καὶ
οὐ μόνον ἀποπέφευγα, ἀλλὰ παντὶ δῆλον τοῦτό γε, ὅτι
εἰ μὴ ἀνέβη Ἄνυτος καὶ Λύκων κατηγορήσοντες ἐμοῦ, κἂν
ὦφλε χιλίας δραχμάς, οὐ μεταλαβὼν τὸ πέμπτον μέρος
τῶν ψήφων.

PLATO, *Apology*, xxv.

1. Write notes on τὸ μὴ ἀγανακτεῖν, ἑκατέρων τῶν ψήφων,
παρ᾽ ὀλίγον, τρεῖς μόναι μετέπεσον, ἀποπεφεύγη, and κἂν ὦφλε
το ψήφων.

2. Explain the meaning of the judicial terms : ἀνακρισις,
ὑπωμοσία, παρακαταβολὴ, ἐπωβελία, ἀγῶνες ἀτίμητοι, ἅπασι
τιμᾶν μακρὰν.

3. Give a brief account of the Sophists, introducing names
and dates.

4. What were the peculiarities of the Socratic philosophy,
as compared with the teachings of his predecessors ?

IV.

Translate :

ΣΩ. Σκόπει τοίνυν, ὦ Σώκρατες, φαῖεν ἂν ἴσως οἱ
νόμοι, εἰ ἡμεῖς ταῦτα ἀληθῆ λέγομεν, ὅτι οὐ δίκαια ἡμᾶς
ἐπιχειρεῖς δρᾶν ἃ νῦν ἐπιχειρεῖς· ἡμεῖς γάρ σε γεννή-
σαντες, ἐκθρέψαντες, παιδεύσαντες, μεταδόντες ἁπάντων
ὧν οἷοί τ᾽ ἦμεν καλῶν σοί τοῖς ἄλλοις πᾶσι πολίταις,
ὅμως προαγορεύομεν τῷ ἐξουσίαν πεποιηκέναι Ἀθηναίων
τῷ βουλομένῳ, ἐπειδὰν δοκιμασθῇ καὶ ἴδῃ τὰ ἐν τῇ πόλει
πράγματα καὶ ἡμᾶς τοὺς νόμους, ᾧ ἂν μὴ ἀρέσκωμεν
ἡμεῖς, ἐξεῖναι λαβόντα τὰ αὑτοῦ ἀπιέναι ὅποι ἂν βού-
ληται. καὶ οὐδεὶς ἡμῶν τῶν νόμων ἐμποδών ἐστιν οὐδ᾽
ἀπαγορεύει, ἐάν τέ τις βούληται ὑμῶν εἰς ἀποικίαν
ἰέναι, εἰ μὴ ἀρέσκοιμεν ἡμεῖς τε καὶ ἡ πόλις, ἐάν τε
μετοικεῖν ἄλλοσέ ποι ἐλθών, ἰέναι ἐκεῖσε, ὅποι ἂν βούλη-
ται, ἔχοντα τὰ αὑτοῦ. ὃς δ᾽ ἂν ὑμῶν παραμείνῃ, ὁρῶν
ὃν τρόπον ἡμεῖς τάς τε δίκας δικάζομεν καὶ τἆλλα τὴν

πόλιν διοικοῦμεν, ἤδη φαμὲν τοῦτον ὡμολογηκέναι ἔργῳ ἡμῖν ἃ ἂν ἡμεῖς κελεύωμεν ποιήσειν ταῦτα, καὶ τὸν μὴ πειθόμενον τριχῇ φαμέν ἀδικεῖν, ὅτι τε γεννήταις οὖσιν ἡμῖν οὐ πείθεται, καὶ ὅτι τροφεῦσι, καὶ ὅτι ὁμο-λογήσας ἦ μὴν πείθεσθαι οὔτε πείθει ἡμᾶς, εἰ μὴ καλῶς τι ποιοῦμεν, προτιθέντων ἡμῶν, καὶ οὐκ ἀγρίως ἐπιταττ-τόντων ποιεῖν ἃ ἂν κελεύωμεν, ἀλλὰ ἐφιέντων δυεῖν θάτερα, ἢ πείθειν ἡμᾶς, ἢ ποιεῖν, τούτων οὐδέτερα ποιεῖ,

<div align="right">PLATO, Crito, xiii.</div>

1. What peculiarities in the Attic use of augments?

2. What are the rules for the place of the augment in compound verbs?

3. What peculiarities in the Attic use of reduplication?

4. Explain the use of καὶ δή καί, οὐ μὴν ἄλλα, καίπερ, καίτοι, ἀμέλει, τηνίκα.

5. Give an account of δοκιμασία εἰς ἄνδρας.

6. State briefly what you know of Athenian colonies.

LATIN.

HONORS AND SCHOLARSHIPS.

Examiners : } Rev. John McCaul, LL.D.
Thomas Moss, M.A.

I.

Translate :

Nominatæ jam antea consulibus provinciæ erant, tum
sortiri jussi : Cornelio Hispania, Sempronio Africa cum
Sicilia evenit. Sex in eum annum decretæ legiones et
socium quantum ipsis videretur, et classis quanta parari
posset. Quatuor et viginti peditum Romanorum millia
sunt scripta et mille octingenti equites, sociorum qua-
draginta millia peditum, quatuor millia et quadringenti
equites : naves ducentæ, viginti quinqueremes, celoces
viginti deductæ. Latum inde ad populum, vellent
juberent populo Carthaginiensi bellum indici : ejusque
belli causa supplicatio per urbem habita atque adorati
dii, ut bene ac feliciter eveniret quod bellum populus
Romanus jussisset. Inter consules ita copiæ divisæ :
Sempronio datæ legiones duæ—ea quaterna millia erant
peditum et treceni equites—et sociorum sedecim millia
peditum, equites mille octiugenti, naves longæ centum
sexaginta, celoces duodecim : cum his terrestribus ma-
ritimisque copiis Tib. Sempronius missus in Siciliam,
ita in Africam transmissurus, si ad arcendum Italia Pæ-
num consul alter satis esset : Cornelio minus copiarum
datum, quia L. Manlius prætor et i͏ · cum haud inva-

lido præsidio in Galliam mittebatur: navium maxime Cornelio numerus deminutus: sexaginta quinqueremes datæ—neque enim mari venturum aut ea parte belli dimicaturum hostem credebant—et duæ Romanæ legiones cum suo justo equitatu et quatuordecim millibus sociorum peditum, equitibus mille sexcentis. Duas legiones Romanas et decem millia sociorum peditum, mille equites socios, sexcentos Romanos Gallia provincia eodem versa in Punicum bellum habuit.

LIVY, B. xxi., c. 17.

1. *Provinicæ.* What was the first Roman province? Into what two classes were the provinces divided under the emperors? Describe the form of government of each.

2. *Socium.* What general class of nouns of the second declension take this form of the genitive plural?

3. *Ipsis.* Explain.

4. *Socii.* Explain the phrase *socii nomen Latinum.*

5. *Supplicato.* For what two different reasons might one be decreed?

6. *Prætor.* Explain the distinction between *prætor* and *proprætor?* When there were two prætors, what were they respectively designated?

7. *Justo equitatu.* Explain.

8. *Duas legiones........habuit.* Give different interpretations.

9. Expand the numerals: IC, I)C, CI), I))C. What is the rule for the case of the objects specified, where smaller numbers follow millia?

II.

Translate :

Romam tantus terror ex hac clade perlatus est, ut jam ad urbem Romanam crederent infestis signis hostem venturum, nec quicquam spei aut auxilii esse, qua portis mœnibusque vim arcerent: uno consule ad Ticinum victo, altero ex Sicilia revocato duobus consulibus duobus consularibus exercitibus victis—quos alios duces, quas alias legiones esse quæ arcessantur? ita territis Sempronius consul advenit, ingenti periculo per effusos passim ad prædandum hostium equites, audacia ma-

gis quam consilio aut spe fallendi resistendive, si non falleret, trangressus. Id quod unum maxime in præsentia desiderabatur, comitiis consularibus habitis in hiberna rediit: creati consules Cn. Servilius et C. Flaminius.

Cæterum ne hiberna quidem Romanis quieta erant, vagantibus passim Numidis equitibus et, quæque iis impeditiora erant, Celtiberis Lusitanisque: omnes igitur undique clausi commeatus erant nisi quos Pado naves subveherent. Emporium prope Placentiam fuit et opere magno munitum et valido firmatum præsidio: ejus castelli expugnandi spe cum equitibus ac levi armatura profectus Hannibal, quum plurimum in celando incepto ad effectum spei habuisset, nocte adortus non fefellit vigiles: tantus repente clamor est sublatus ut Placentiæ quoque audiretur: itaque sub lucem cum equitatu consul aderat jussis quadrato agmine legionibus sequi.

<div align="right">Livy, B. xxi., c. 57.</div>

1. Give the derivations of: *clades, infestus, signum, passim, fallo, comitia, commeatus, vigil, sequor.*

2. Write notes upon: *infestis signis—qui a portis—uno consule—Ticinum—comitiis consularibus—quæque iis—quadrato agmine—Placentia.*

<div align="center">III.</div>

1. From whom did Livy borrow most of his account of the passage of the Alps?

2. Who composed the so-called supplements to the books of Livy? Characterise them.

3. Who was the first Roman historian? In what language did he write? How is he connected with the subject of the 21st book of Livy?

<div align="center">IV.</div>

Translate:

Postremo, promptis jam et aliis seditionis ministris, velut contionabundus interrogabat:

Cur paucis centurionibus,, paucioribus tribunis, in modum servorum obedirent? quando ausuros exposcere remedia, nisi novum et nutantem adhuc principem precibus vel armis adirent? satis per tot annos ignavia peccatum, quod tricena aut quadragena stipendia senes,

et plerique truncato ex vulneribus corpore, tolerent:
ne dimissis quidem finem esse militiæ, sed apud vexillum
retentos alio vocabulo eosdem labores perferre.   Ac si
quis tot casus vita superaverit, trahi adhuc diversas in
terras, ubi per nomen agrorum uligines paludum vel
inculta montium accipiant.   Enimvero militiam ipsam
gravem, infructuosam : denis in diem assibus animam
et corpus æstimari : hinc vestem, arma, tentoria, hinc
sævitiam centurionum et vacationes munerum redimi.
At hercule verbera et vulnera, duram hiemem, exercitas
æstates, bellum atrox aut sterilem pacem sempiterna ;
nec aliud levamentum quam si certis sub legibus militia
iniretur, ut singulos denarios mererent, sextus decumus
stipendii annus finem afferret ; ne ultra sub vexillis
tenerentur, sed iisdem in castris præmium pecunia sol-
veretur.   An prætorias cohortes, quæ binos denarios
acceperint, quæ post sedecim annos penatibus suis red-
dantur, plus periculorum suscipere ?   Non obtrectari a
se urbanas excubias : sibi tamen apud horridas gentes e
contuberniis hostem aspici.

<div align="right">TACITUS, <i>Annals</i>, B. I.. c. 17.</div>

1. Write brief notes upon : *promptis jam et aliis—
ausuros — stipendia — alio vocabulo—singulos denarios—
prætorias cohortes—contuberniis.*

<div align="center">V.</div>

1. What works of Tacitus have been preserved to modern
times ?

2. Who first gave the name of "annals" to that from
which the preceding passages are selected ?   Discuss the
appropriateness of the term.

3. Give the names of other authorities for the history of
the early emperors with particulars of each.

4. Mention peculiarities of Tacitus in the syntax of *fungi,
potiri, adipisci,* and *praesidere.*

5. Give peculiar modes adopted by him of writing : *quo-
tidie, epistola, sœvum, toties, decimus, transmittere,* and
inclitus.

GREEK AND LATIN.
HONORS.

Examiners: { REV. JOHN McCAUL, LL.D.
{ THOMAS MOSS, M.A.

I.

XO. ὅστις τοῦ πλέονος μέρους
χρῄζει τοῦ μετρίου παρεὶς
ζώειν, σκαιοσύναν φυλάσσων
ἐν ἐμοὶ κατάδηλος ἔσται.
ἐπεὶ πολλὰ μὲν αἱ μακραὶ
ἁμέραι κατέθεντο δὴ
λύπας ἐγγυτέρω, τὰ τέρ-
ποντα δ᾽ οὐκ ἂν ἴδοις ὅπου,
ὅταν τις ἐς πλέον πέσῃ
τοῦ θέλοντος· ὁ δ᾽ ἐπίκουρος ἰσοτέλεστος,
Ἄϊδος ὅτε Μοῖρ᾽ ἀνυμέναιος
ἄλυρος ἄχορος ἀναπέφηνε,
θάνατος ἐς τελευτάν.

SOPHOCLES, *Œdip. Colon.*, vv. 1211-1223.

1. Mark the quantity of each syllable, scan, and give the metrical name of each verse.

2. Notice different readings, and translate accordingly.

3. Explain the construction of τοῦ μετρίου παρεὶς ζώειν, and ἐς πλέον πέσῃ τοῦ θέλοντος,

4. What are the arrangements denominated *Epodica*, *Mesodica*, *Proodica*, *Periodica*, *Palinodica*, κατὰ περικοπὴν ἀνομοιομερῆ, and ἀπολελυμένα ?

5. Give examples of words differing in quantity in the Epic and the Attic writers.

6. What are the metres called Æolic, Logœdic, Prosodiac, and Anacreontic ?

II.

Translate :

AN. αἰαῖ, ἔστιν ἔστι νῶν δὴ
    οὐ τὸ μὲν, ἄλλο δὲ μὴ, πατρὸς ἔμφυτον
    ἄλαστον αἷμα δυσμόροιν στενάζειν,
    ᾧτινι τὸν πολὺν
    ἄλλοτε μὲν πόνον ἔμπεδον εἴχομεν,
    ἐν πυμάτῳ δ᾽ ἀλόγιστα παροίσομεν
    ἰδόντε καὶ παθούσα.
XO. τί δ᾽ ἔστιν ;   AN. ἔστιν μὲν εἰκάσαι, φίλοι.
XO· βέβηκεν ;
AN.   ὡς μάλιστ᾽ ἂν εἰ πόθῳ λάβοις.
    τί γὰρ, ὅτῳ μήτ᾽ Ἄρης
    μήτε πόντος ἀντέκυρσεν,
    ἄσκοποι δὲ πλάκες ἔμαρψαν
    ἐν ἀφανεῖ τινι μόρῳ φερόμενον.
    τάλαινα· νῶν δ᾽ ὀλεθρία
    νὺξ ἐπ᾽ ὄμμασιν βέβακε.
    πῶς γὰρ ἤ τιν᾽ ἀπίαν γᾶν
    ἢ πόντιον κλύδων᾽ ἀλώμεναι βίου
    δύσοιστον ἕξομεν τροφάν ;
IΣ. οὐ κάτοιδα. κατά με φόνιος
    Ἀΐδας ἕλοι πατρὶ
    τάλαιναν· ὡς ἔμοιγ᾽ ὁ μέλλων βίος οὐ βιωτὸς.
XO. ὦ διδύμα τέκνων ἀρίστα,
    τὸ φέρον ἐκ θεοῦ καλῶς
    μηδὲν ἄγαν φλέγεσθον· οὔ τοι κατάμεπτ᾽ ἔβητον.
AN. πόθος καὶ κακῶν ἄρ᾽ ἦν τις.
    καὶ γὰρ ὃ μηδαμὰ δὴ τὸ φίλον, φίλον·
    ὁπότε γε καὶ τὸν ἐν χεροῖν κατεῖχον.
    ὦ πάτερ, ὦ φίλος,
    ὦ τὸν ἀεὶ κατὰ γᾶς σκότον εἱμένος·
    οὐδὲ γὰρ ὢν ἀφίλητος ἐμοί ποτε
    καὶ τᾷδε μὴ κυρήσῃς.

SOPHOCLES, *Œdip. Colon.*, vv. 1670-1703.

1. Distinguish *Colonus Hippius* and *Colonus Agoræus*, and give an account of each.

2. Write notes on ἰδόντε καὶ παθοῦσα, ἔστιν μὲν εἰκάσαι, ὡς μάλιστ' ἄν εἰ, ἀπίαν γᾶν, ἔβητον.

3. Distinguish ἀπολογεῖσθαι and ἀπολογίζεσθαι, ἄρτι and ἀρτίως, ἀτιμοῦται and ἀτιμάζεται, ἔνδον and ἔσω, ἐρώτησις, πεῦσις, and ἀνάκρισις, καιρὸς and χρόνος, ὀλίγον and μικρὸν.

4. Give examples of *Synæresis* and *Synalœphe*, distinguishing *crasis*, *ecthlipsis*, and *aphæresis*. What reasons for believing that there is no essential difference between *synæresis* and *synalœphe*? On what grounds has the rule of Porson and Dawes relative to the subscription and omission of the iota in certain cases been impugned?

5. State briefly what you know of any dramas that were represented before the time of Æschylus, introducing names and dates where you can.

6. Explain the meaning of πιθοίγια, αὐτοσχεδιάσματα, ἐπεισόδιον, στάσιμον, ἐμμέλεια, ἔκσκευα, and ὑποκόλπια.

III.

Translate :

Pн. Itane patris ais conspectum veritum hinc abiisse? Ge. Admodum.

Pн. Phanium relictam solam? Ge. Sic. Pн. Et iratum senem?

Ge. Oppido. Pн. Ad te summa solum, Phormio, rerum redit.

Tute hoc intristi : tibi omne est exedendum. Accingere.

Ge. Obsecro te. Ph. Si rogabit. Ge. In te spes est. Pн. Eccere ;

quid si reddet? Ge. Tu impulisti. Pн. Sic opinor. Ge. Subveni.

Pн. Cedo senem : jam instructa sunt mihi corde consilia omnia.

Ge. Quid ages? Pн. Quid vis? nisi uti maneat Phanium : atque ex crimine hoc

Antiphonem eripiam : atque in me omnem iram derivem senis ?

Ge. O vir fortis atque amicus. Verum hoc saepe, Phormio,

vereor, ne istaec fortitudo in nervom erumpat denique. Pн. Ah,

non ita est: factum est periclum, jam ?pedum vi-
sast via.

Quot me censes homines iam deverberasse usque ad
necem,

hospites, tum cives? quo magis novi, tanto sae-
pius.

Cedodum, en unquam injuriarum audisti mihi scrip-
tam dicam?

GE. Qui istuc? PH. Quia non rete accipitri tendi-
tur neque miluo,

qui male faciunt nobis: illis qui nil faciunt, ten-
ditur:

quia enim in illis fructus est, in istis opera lu-
ditur.

Aliis aliunde est periclum, unde aliquid abradi po-
test;

mihi sciunt nil esse. Dices, ducent damnatum do-
mum.

TERENCE, *Phormio*, Act II., Scene 2.

1. Write brief notes upon the following words and
phrases: *Admodum; summa rerum; intristi; eccere; si
reddet; iram derivem; nervum; scriptam dicam; ducent
damnatum domum; cedodum.*

IV.

Translate:

AN. Quid hic coeptat, aut quo evadet hodie? GE.
An legibus
daturum poenas dices, si illam ejecerit?
Iam id exploratumst. Heja, sudabis satis,
si cum illo inceptas homine: ea eloquentia est.
Verum pono esse victum eum: at tandem tamen
non capitis ejus res agitur, sed pecuniae.
Postquam hominem his verbis sentio mollirier;
soli sumus nunc hic, inquam; eho, quid vis dari
tibi in manum, ut herus his desistat litibus:
haec hinc facessat, tu molestus ne sies.
AN. Satin illi di sunt propitii? GE. Nam sat scio,
si tu aliquam partem aequi bonique dixeris,
ut est ille bonus vir, tria non commutabitis
verba hodie inter vos. DE. Quis te istaec jussit
loqui?
CH. Immo non potuit melius pervenirier
eo quo nos volumus. AN. Occidi. CH. Perge eloqui.

GE. A primo homo insanibat. DE. Cedo, quid po-
stulat ?
GE. Quid ? nimium. CH. Quantum libuit, dic. GE.
Siquis daret
talentum magnum. DE. Immo malum hercle : ut nil
pudet !

TERENCE, *Phormio*, Act IV., Scene 3.

1. *Heja.* Whence derived ?

2. *Verum pono.* What other reading ?

3. *Talentum.* Why called *magnum ?* Give its sub-
divisions.

4. Explain : Ω *Plaudite ; Calliopius recensui.*

5. Mention the principal varieties of Trochaic verse used
by Terence.

6. What do you consider the true explanation of the
so-called *comic licenses* in the Terentian metres ?

7. State any reason for supposing that the Phormio was
familiar to the Roman public before it was placed on the
stage by Terence.

8. Explain *fabulæ prætextatæ, togatæ, planipedes* and
Atellanæ.

9. Translate and explain : *Modos fecit tibiis paribus
dextris et sinistris.* What were the *tibiæ dextræ* and *tibiæ
sinistræ* also called ?

10. What writers of the New Comedy does Terence prin-
cipally imitate ? Give instances.

11. Compare and contrast the styles of Plautus and
Terence.

University of Toronto.

THIRD YEAR.

HYDROSTATICS AND OPTICS.

Examiner: REV. W. JONES, B.A.

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1. Define a fluid and shew from your definition that the pressure of a fluid upon a rigid surface in contact with it is entirely normal to the surface. What is meant by the pressure at a point in a fluid? How is it measured?

2. Define specific gravity, and explain the meaning of the symbols in the equation $W = SV$. What is the unit of weight implied in this equation?

Find the weight of a cubical block of iron whose edge is 10 inches, having given the specific gravity of iron **7.844**, and the weight of a cubic foot of water 1000 ounces.

3. Investigate an expression for the total normal pressure on a plane surface immersed in a fluid.

A rectangle immersed in a fluid, with one side in the surface, is divided by horizontal lines into n such parts that the pressures upon them are all equal; shew that the breadth of the rth is to that of the $(r+1)^{th}$ part as $\sqrt{r} - \sqrt{r-1}$ is to $\sqrt{r+1} - \sqrt{r}$.

4. State Boyle's law regarding the pressure of an elastic fluid, and describe an experiment by which it is verified.

A cylinder is placed with its axis horizontal, and a closely fitting piston is in equilibrium at a distance a from the bottom of the cylinder. A certain force will pull it out through a distance b; find how far the same force acting the other way would push it in.

5. Describe and explain the working of Smeaton's air-pump.

Shew that if A, B be the respective volumes of the receiver and of the cylinder, and b the height of the latter, the

valve, supposed weightless, will open during the $(n+1)^{th}$ stroke, when the piston has ascended through a distance $b\left\{1-\left(\dfrac{A}{A+B}\right)^n\right\}$.

6. Upon what property of bodies does the principle of the thermometer depend? Describe how Fahrenheit's thermometer is filled and graduated.

If F, C, R indicate the same temperature on Fahrenheit's, the centigrade, and Reaumur's thermometers respectively, shew that $\dfrac{F-32}{9}=\dfrac{C}{5}=\dfrac{R}{4}$.

If a certain temperature be indicated on the centigrade and Fahrenheit's thermometers respectively by numbers in the ratio of $1:2$; find the number which indicates it on Reaumur's thermometer.

7. Distinguish between physical and geometrical optics. State the laws of reflection and refraction of light.

A circle which reflects light from its inner surface has two holes in it; determine the course of a ray, which, entering at one hole, after four reflections passes out at the other.

8. A luminous point is placed between two parallel plane mirrors; find the distances from it of its successive images.

If P be the point, $P_1, P_2, P_3 \ldots$ its successive images, shew that $P_1P_2 = PP_3$, $P_2P_3 = P_1P_4$, $P_3P_4 = P_1P_6 \ldots$ $P_nP_{n+1} = P_1P_{2n}$.

9. What is meant by the critical angle of a medium? Define the refracting angle of a prism.

Shew that a ray refracted through a prism denser than the surrounding medium, in a plane perpendicular to its edge, will be turned towards the thicker part of the prism.

If the refracting angle of a prism be equal to the critical angle of the medium of which it is formed; prove that an incident ray nearly parallel to one face will pass out of the prism at right angles to the other face.

10. Find the geometrical focus of a pencil of rays directly incident upon a concave mirror.

Shew that the conjugate foci move in opposite directions.

11. Describe the Astronomical Telescope, and trace the course of a pencil of rays through it.

12 Explain the formation of the primary rainbow.

How must a person be situated in order to see it? Shew that the order of colours in the secondary bow is the reverse of that in the primary bow.

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THIRD YEAR.

STATICS AND DYNAMICS.
HONORS.

Examiner: J. B. Cherriman, M.A.

1. State and prove the principle of the parallelogram of couples. Having given the components of a couple in two directions, at right angles to each other, find the components in two directions, one of which coincides with one of the former, and the other is inclined at a given angle to this.

2. Find the conditions that a given set of forces acting on a rigid system may be reducible (1) to a single force (2) to a single couple. If the forces (of which the type is F at the point x, y, z) be all parallel to the line whose direction cosines are l, m, n, shew that in case (1) the equations to the line of action of the single force are

$$\frac{1}{l}\left(x' - \frac{\Sigma.Fx}{\Sigma.F}\right) = \frac{1}{m}\left(y' - \frac{\Sigma.Fy}{\Sigma.F}\right) = \frac{1}{n}\left(z' - \frac{\Sigma.Fz}{\Sigma.F}\right).$$

and in case (2), find the moment of the resultant couple.

3. Investigate the conditions of equilibrium when a rigid system is kept at rest by assigned forces.

If three forces keep a rigid system at rest, they must either be parallel, or pass through the same point.

Under what circumstances will three couples keep a system at rest?

4. Shew how to find the centre of gravity of any body. Find the centre of gravity of a circular oblique cone, in which the density at any point varies as some power of the distance of the point from the base.

5. When a flexible string is kept at rest under the action of given forces in one plane, obtain an expression for the tension at any point.

If the forces be all parallel, and t be the tension at a point where the tangent makes an angle ψ with the direction of the forces, prove that $t \sin \psi$ is the same throughout.

6. Shew how to find the increase of length in an elastic string, when stretched by any forces in direction of its length.

A string which is slightly extensible (λ, the constant of Hooke's law, being small) is kept upon a smooth plane curve, being fastened at one point of it, by a uniform force f acting at each point along the tangent, shew that the pressure of the string upon the curve at a point where the radius of curvature is ρ, and s is the length of the arc measured from the free end of the string, is

$$\frac{1}{\rho} \left(fs + \tfrac{1}{2}\lambda f^2 s^2 \right)$$

7. When one body rests upon another fixed, having a point of their surfaces in contact, and the surfaces being sufficiently rough to prevent sliding, shew how to find whether the equilibrium is stable or unstable.

A segment of a uniform paraboloid of revolution, cut off by a plane at right angles to the axis, and at a distance from the vertex equal to $\tfrac{2}{3}$ latus-rectum, rests (vertex downwards, and axis vertical) within a fixed spherical bowl whose radius is equal to the latus-rectum. Determine the nature of the equilibrium.

8. Find the attraction of a uniform circular arc on a point situated in its median line, the law of attraction being that of the inverse square of the distance.

If a particle move freely under this attraction from the centre of the circle to the chord of the arc, find the velocity acquired.

9. A particle describing a plane orbit, obtain expressions for the velocities and accelerations of velocities along the radius-vector, and perpendicularly to it.

If the acceleration perpendicular to the radius-vector be always proportional to the velocity in that direction, the areas swept out will increase in a geometric progression as the times increase in an arithmetic.

10. Force varying as the distance from a fixed point, determine the position and dimensions of the orbit when the circumstances of motion at an assigned point are given.

If e be the excentricity, μ the absolute force, t the time of moving between two points where the directions of motion are at right angles, and for which the vectorial angles measured from the apse-line are a, β, shew that

$$\tan\beta - \tan a = e^2 \sqrt{1-e^2} \tan \left(\sqrt{\mu}\, t \right).$$

11. Force to centre varying as (distance) $^{-5}$, find the orbit where the velocity at an apse is equal to (1), the velocity in a circle at that distance; (2), the velocity which would be acquired by falling freely from an infinite distance to that point under the action of the force.

12. A particle moves on a smooth fixed plane curve under given forces, determine the velocity at any point, and the pressure on the curve.

A rigid parabola is fixed in a vertical plane, with its axis vertical, and vertex upwards, $4\,m$ being its latus-rectum. A particle is projected from the vertex along the curve, and acted on by gravity; shew that it will not leave the curve, whether it be moving on the upper or on the under side, if the height due to the velocity of projection lie between $\sqrt{3}\,m$ and $\frac{3}{2}m$.

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HYDROSTATICS AND OPTICS.
HONORS.

Examiner : J. B. CHERRIMAN, M.A.

1. Investigate an expression for the pressure at any point of a fluid kept at rest by given forces.

A sphere is filled with a heavy incompressible fluid which is acted on by a repulsive force tending from the centre and varying as any function of the distance, as well as by gravity ; shew that if the pressure at the highest point be equal to the weight of a column of fluid whose height is equal to the radius, the pressures upon the upper and lower halves of the sphere are as 3 to 5.

2. Obtain the co-ordinates of the centre of pressure of a plane surface exposed to a heavy incompressible fluid.

How could it be ascertained whether a *curved* surface has a centre of pressure ?

If a hemispherical surface be just submerged with a tangent to its base in the surface of the fluid, the normal at the centre of pressure makes an angle $\cos^{-1} \frac{1}{4}$ with the base.

3. Obtain the conditions of equilibrium when a body floats in a fluid (1) freely, (2) under constraint.

A thin uniform rod (length, $2a$) supported by a string at one end floats in a heavy fluid where the density varies as the nth power of the depth, the rod being inclined to the vertical at an angle θ and having its centre in the surface of the fluid. Shew that if the rod floated freely in a vertical position, the length immersed would be

$$a \cos \theta \left(\frac{1}{n+1} + \frac{1}{n+2} \right)^{\frac{1}{n+1}}.$$

4. Explain accurately what is meant by the *metacentre*, and shew how the nature of the equilibrium depends on its position.

An elliptic lamina floats vertically in a fluid of double its density, find the character of the equilibrium in its two positions.

5. Investigate the relation

$$p = k\rho(1+at)$$

stating accurately the nature of the constants involved; and if the values of k, a for a certain gas be given with reference to the centigrade thermometer, determine their values for Fahrenheit's.

Given volumes (V, V') of two gases at different temperatures and pressures are put into a closed vessel $(V+V')$, and the temperature is then reduced to 0; determine the pressure of the mixture.

6. When a pencil of light is incident directly on a spherical reflector, determine where the extreme ray cuts the axis after reflection.

If the pencil consist of parallel rays, and its breadth be $2y$, which is small compared with the radius (r), shew that the longitudinal and lateral aberrations are

$$\frac{y^2}{4r} \quad \text{and} \quad \frac{y^3}{2r^2}.$$

7. When a small oblique pencil is incident on a plane refracting surface, explain the formation of the focal lines.

If a straight line, below the surface of water and parallel to it, is viewed by an eye above the surface somewhere in the vertical plane containing the line, find the form of the image constituted by secondary foci.

8. Find the position of the focal lines when a small pencil is obliquely refracted through a prism, the axis being near to the edge, and shew under what circumstances the foci will coincide.

What is the bearing of this latter observation upon Newton's experiment ?

If i be the angle of the prism, μ the refractive index for mean rays, $d\mu$ the difference of μ for the extreme rays, and a ray pass with minimum deviation, shew that the whole dispersion of the ray is

$$\sqrt{\dfrac{4d\mu}{\left\{ \operatorname{cosec}^2 \dfrac{i}{2} - \mu^2 \right\}}}.$$

9. Investigate the position of the geometrical focus of a pencil after direct passage through a thin lens.

When a convex lens is used as a simple microscope, having

given the least distance of distinct vision, find the greatest angle under which a given straight line can be seen.

10. State the different conditions which require to be fulfilled in forming an achromatic combination according as it is to be employed as an object-glass or an eye-glass in a telescope.

Find the distance between two given lenses on the same axis which will render the pair achromatic in the two cases respectively, retaining only first powers of the differences of refractive index, and supposing the incident rays to be parallel to the axis. Shew that in the first case the two lenses cannot be of the same name ; and in the second case, both cannot be concave, but they may be convex unless they are of the same substance and of equal focal length.

11. In the common astronomical telescope, find the angular magnitude of the field of view when the ragged edge is stopped out.

For a short-sighted person, will this field be larger or smaller?

12. When a full pencil of parallel rays falls on a refracting sphere and emerges after any number of internal reflections, shew that there are two rays which undergo a minimum deviation.

Shew how this result is applied in the explanation of the rainbow, and having given the magnitude of this deviation, and assuming that it is least for the red and greatest for the violet rays, shew how to determine which color is nearest the sun.

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EQUATIONS, INTEGRAL CALCULUS, AND GEOMETRY,

HONORS AND SCHOLARSHIPS.

Examiner : REV. W. JONES, B.A.

1. Investigate the relations between the coefficients and roots of an equation.

Find the sum of the cubes of the roots of the equation
$$x^3 - px^2 + qx - r = 0.$$

2. Having given $a, b, c \ldots$ the roots of an equation, explain how to obtain an equation whose roots are given symmetrical functions of $a, b, c \ldots$

The equation $x^3 + qx + r = o$ has roots a, b, c; form the equations whose roots are

  (i.) bc, ca, ab ;

  (ii.) $a + \dfrac{1}{bc}, b + \dfrac{1}{ac}, c + \dfrac{1}{ab}$;

  (iii.) $a^2 + b^2 - ab, b^2 + c^2 - bc, c^2 + a^2 - ca$.

3. Resolve $x^{2n} - 2x^n \cos\theta + 1$ into its quadratic factors.

Hence shew that $(x^n - 1)^2 = (x - 1)^2 \times (x^2 - 2x \cos\dfrac{\pi}{n} + 1)$

$\times (x^2 - 2x \cos\dfrac{2\pi}{n} + 1) \ldots\ldots\ldots\ldots\ldots (x^2 - 2x \cdot \cos\dfrac{\overline{2n-1}\pi}{n} + 1)$

4. Describe fully Sturm's method of separating the roots of an equation. Shew how the process will be simplified if one of the auxiliary functions have no real root. What condition must be satisfied by the series of functions in order that all the roots of the given equation may be real?

Find how many real roots the equation $x^3 - 5x^2 + 3x + 1 = 0$ has.

5. Integrate the following functions

(i.) $\dfrac{1}{a + b \cos x}$, (ii.) $\dfrac{\tan x}{\sqrt{1 + \sec x}}$, (iii.) $\dfrac{\cos^3 x}{1 + a \sin x}$,

and find a formula of reduction for the integration of $\dfrac{\sin^n \theta}{\cos^r \theta}$.

6. Shew how to change the variables in a double integral. Change the order of integration in the expression

$$\int_0^{\frac{a}{2}} \int_{\sqrt{2ax - x^2}}^{\sqrt{a^2 - x^2}} V \, dx \, dy \text{ ; also change the variables to } r \text{ and } t$$

in the expression $\displaystyle\int_0^a \int_0^b V \, dx \, dy$, having given $x^2 + y^2 = r$

and $\dfrac{y}{x} = t$.

7. Shew that $\displaystyle\int_0^{2a} f(x) \, dx = 2 \int_0^a f(x) \, dx$, or $= 0$, according as $f(2a - x) = \pm f(x)$.

8. Prove the following

(i.) $\displaystyle\int_0^{\frac{\pi}{2}} \log (\sin x) \, dx = \frac{\pi}{2} \log \frac{1}{2}$,

(ii.) $\displaystyle\int_0^\infty e^{ax} \sin bx \, dx = \frac{b}{a^2 + b^2}$

(iii.) $\displaystyle\int_0^\infty e^{-x} x^n \, dx = \underline{|n}$.

9. Find the equation to the plane diametral to the chords parallel to the line $\dfrac{x}{l} = \dfrac{y}{m} = \dfrac{z}{n}$ for a surface of the second degree.

Find it when the surface is the ellipsoid $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} + \dfrac{z^2}{c^2} = 1$.

Find also the direction of the chords of this ellipsoid which are bisected by the plane $lx + my + nz = 0$.

10. Describe a method of finding the equation to a cylindrical surface which has its axis parallel to a given line, and which envelopes a given surface of the second degree.

Shew that the equation to the cylindrical surface whose

axis is parallel to the line, and which envelopes the surface, whose equations are gaven in question 9, is

$$\left(\frac{lx}{a^2} + \frac{my}{b^2} + \frac{nz}{c^2}\right)^2 = \left(\frac{l^2}{a^2} + \frac{m^2}{b^2} + \frac{n^2}{c^2}\right)\left(\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} - 1\right).$$

11. If ρ, $\rho,'$ and R be the respective radii of curvature of the principal and normal sections of a surface, shew that

$$\frac{1}{R} = \frac{1}{\rho}\cos^2\theta + \frac{1}{\rho'}\sin^2\theta,$$

where θ is the angle between the planes of one of the principal and of the normal section.

Define a line of curvature of a surface, and investigate the differential equation to the lines of curvature.

$$(VdW - WdV)\, dx = (WdU - UdW)\, dy = (UdV - VdU)\, dz.$$

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THIRD YEAR.

CO-ORDINATE GEOMETRY AND DIFFERENTIAL CALCULUS.

HONORS AND SCHOLARSHIPS.

Examiner : J. B. Cherriman, M.A.

1. Shew how to find the centre and axes of the curve represented by the general equation of the second order between rectangular co-ordinates. Examine the geometrical signification of the conditions under which a parabola, a circle, or a rectangular hyperbola may be represented by the equation

$$\left(\frac{x}{a} + \frac{y}{b}\right)\left(\frac{x}{a'} - \frac{y}{b'} - 1\right) + \left(\frac{x}{a} - \frac{y}{b}\right)\left(\frac{x}{a'} + \frac{y}{b'} - 1\right) = 0.$$

2. Explain the method of expressing the equation to a straight line in trilinear co-ordinates, and find the condition that two lines whose equations are given may be parallel.

3. Investigate the harmonic properties of a complete quadrilateral. If a conic be described having the third diagonal for the chord of contact to the other two as tangents, shew that the points of intersection of this conic with two opposite sides of the quadrilateral lie, two and two, on lines which meet in the intersection of the other opposite sides.

4. If a, β, γ, be trilinear co-ordinates of any point in a line, and a', β', γ', be those of another point in the line at distance r from the former, shew that

$$\frac{a - a'}{l} = \frac{\beta - \beta'}{m} = \frac{\gamma - \gamma'}{n} = r,$$

l, m, n being constants connected by a certain relation.

Find the intersections of this line with the conic whose equation is $\phi(\alpha, \beta, \gamma,) = 0$, ϕ being a homogeneous function of the second order, and shew that the centre of the conic is given by

$$\frac{1}{a}\frac{d\phi}{da} = \frac{1}{b}\frac{d\phi}{d\beta} = \frac{1}{c}\frac{d\phi}{d\gamma},$$

where a, b, c, are the sides of the triangle of reference.

5. State Lagrange's Theorem, and deduce Laplace's.

Expand x in ascending powers of y from the equation

$$y = x(A + By + Cy^2 + Dy^3 + \ldots\ldots)$$

6. If a plane curve roll on a fixed straight line, shew how to find,

(1.) The locus of any given point in its plane.

(2.) The envelope of any given straight line in its plane.

The rolling curve being a circle, find the above when the given point is on the circumference, and the given line is a diameter of the circle.

7. To find the maxima and minima values of a function of several variables.

Find when xyz is a maximum or minimum, where

$$\left(\frac{x}{a}\right)^p + \left(\frac{y}{b}\right)^q + \left(\frac{z}{c}\right)^r = 1.$$

Is there any way of ascertaining in this case or in the general one whether the value determined is a maximum or a minimum?

8. Find the angle between two planes whose equations are given in rectangular co-ordinates.

Find the equation to a plane containing the two straight lines,

(i) $\dfrac{x}{l} = \dfrac{y}{m} = \dfrac{z}{n}$

(ii) $Ax + By + Cz = 0$. $A'x + B'y + C'z = 0$.

9. Find the general functional and the differential equation to cylindrical surfaces.

A thin wire in the form of a helix is laid on the ground with its axis due north and south; find the form of its shadow at noon.

10. Trace the form of the hyperboloid,

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1.$$

Shew that through any point of it two straight lines can be drawn wholly coinciding with the surface, and find the locus of the points where these two lines are at right angles to each other.

11. Find the locus of the middle points of chords in an ellipsoid which pass through a given point, and the locus of the centres of the sections made by planes passing through a given line.

12. Shew how to discriminate the species of the surface represented by the general equation of the second degree between three rectangular co-ordinates.

Examine the surface

$$xy + yz + zx - x + 2y + 3z = 0.$$

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THIRD YEAR, AND CANDIDATES FOR B.A.

PROBLEMS.

Examiners: $\begin{cases} \text{J. B. Cherriman, M.A.} \\ \text{Rev. W. Jones, B.A.} \end{cases}$

1. The axes of a hyperbola are given in direction, and its asymptotes revolve about two fixed points; prove that the locus of its centre is a rectangular hyperbola whose centre is midway between the two fixed points.

2. If a circle and a rectangular hyperbola be described, with reference to which an assigned triangle is self-conjugate, shew that the centre of the circle is at the intersection of perpendiculars from the angles on the sides of the triangle, and the centre of the hyperbola is on the circumscribing circle of the triangle.

3. It is said that there will be a point of inflexion in a spiral when $\frac{dp}{dr} = 0$ or ∞ and changes sign. Shew that such is not the case at the pole when the spiral passes through it.

For instance, take the spiral of Archimedes, $r = a\theta$.

4. If r, $2c$ be the radius-vector and chord of curvature through the pole at any point of a spiral, and r', $2c'$ be the same for the corresponding point in the locus of the foot of the perpendicular from the pole on the tangent, prove that

$$\frac{c}{r} + \frac{r'}{c'} = 2.$$

5. Every equation of the form $x^4 + 2px^3 + qx^2 + rx + s = 0$ can be solved by means of a quadratic equation, if $p^3 - pq + r = 0$, and $4p^2 s = r^2$.

6. On the surface of a sphere n equal particles are placed so

that their centre of gravity is the centre of the sphere; if a be the angle subtended at the centre by the chord joining any two of them, prove that

$$\Sigma \cos a = -\frac{n}{2}.$$

7. A smooth surface of revolution standing with its axis vertical, find its form in order that a heavy elastic ring may be at rest when placed round any horizontal section of it.

8. The centre of the circle, radius r, inscribed in a triangle ABC, is an origin of light; a ray of light after reflection at the sides AB, AC returns again to the origin; shew that the length of its path is $4\,r \cos \dfrac{A}{2}$.

9. Light admitted into a darkened room through a very small hole in the shutter is received upon a vertical screen; examine the nature of the curves which bound the illuminated portions of the screen when it is placed (i.) perpendicular, (ii.) obliquely to the window.

10. A luminous point S in the side AB of a triangle ABC equally illuminates the other two sides; if AS, BS subtend at C the angles θ, ϕ respectively, shew that

$$\sin (\theta - \phi) = \cos A \sin \phi - \cos B \sin \theta.$$

11. The respective specific gravities of two fluids, and of the atmosphere are σ_1, σ_2, and ρ; a body floats in the first fluid with $\dfrac{1}{n}$ th, and in the second with $\dfrac{1}{m}$ th, of its volume immersed; shew that $m\sigma_1 - n\sigma_2 = (m - n)\rho$.

12. If a plane area be totally immersed vertically in a heavy incompressible fluid, and X, x be the depths of its centre of pressure and centre of gravity below the surface, and P the pressure on the surface; shew that when the area is made to descend without rotation through a small distance c, the increase of pressure will be $P\dfrac{c}{x}$, and its centre of pressure will descend through a distance

$$2c - \frac{X}{x} c \quad.$$

13. A cylindrical diving bell descends in water; the heights of a water barometer in the bell are h, h', before immersion and when the top of the bell is just submerged, respectively; shew that the length of the bell is

$$\frac{h'}{h} (h' - h) \quad.$$

14. A uniform paraboloid terminated by a plane perpendicular to its axis, rests with its vertex on a rough fixed plane in neutral equilibrium; shew that the equilibrium will also be neutral if the paraboloid be scooped out into a thin shell, and filled with a heavy fluid to the same depth of axis, the weight of the fluid being half the weight of the shell, and the centre of gravity of the shell being at the focus.

15. A cone floating freely (axis vertical and vertex downwards) in a fluid has an elastic string (without weight) attached to its vertex, the other end being attached to the centre of gravity of a flat disk, (also without weight,) which is lying in close contact with the horizontal base of the vessel containing the fluid, the string being in its natural state and vertical. Prove that (if the area of the disk lie between certain limits) when the level of the fluid is raised by the addition of fluid, there is a position where the length of the string will not be altered by a small change of level, and determine in the general case the depth of the fluid when the disk will be lifted, if it ever will be.

16 Prove that

$$\left\{ \frac{d}{dx} + \phi'(x) \right\}^n u = \varepsilon^{-\phi(x)} \left(\frac{d}{dx} \right)^n \varepsilon^{ax} u.$$

17. A parabola (latus-rectum $4a$,) is described under two accelerations, one to the focus, and the other along the tangent, their respective values at focal distance r being f and F; prove that

$$\frac{df}{dr} + \frac{2f}{r} = \frac{F}{\sqrt{r^2 - ar}}.$$

18. Shew that the cycloid is tautochronous when the resistance of the medium is constant, and the successive heights to which the oscillating particle rises, are in arithmetical progression.

19. At all points of an ellipsoid which are equidistant from the centre, the sum of the curvatures in two perpendicular normal sections varies as the perpendicular from the centre on the tangent.

University of Toronto.

THIRD YEAR.

HISTORY.

Examiners : } D. WILSON, LL.D.
{ J. A. BOYD, M.A.

** *Answers to all the questions are not indispensable ; but* FULL ANSWERS *are required to as many as can be over- taken within the time.*

I. Outlines of modern history.

(1.) Enumerate the events which mark the commence- ment of modern history; and contrast the characteristics of modern, with those of mediæval and ancient history.

(2.) Dr. Arnold says : "The undoubted tendency of the last three centuries has been to consolidate what were once separate states or kingdoms into one great nation." Men- tion the most important changes, in chronological order, which serve to confirm this statement.

(3.) Sketch the rise, progress and termination of the contest between the Girondists and Jacobins.

(4.) Give some account of the war that began in 1812 between the United States and England.

II. British history from the revolution to the present time.

(1.) What historical importance attaches to the career of John Wilkes?

(2.) What led to the impeachment of Dr. Sacheverel? What were its results, political and constitutional?

(3.) Enumerate those historical facts which shew the great personal influence of George III. in determining the course of events during his reign.

(4.) Give some account of the prosecution of Horne Tooke, and its results.

(5.) When, and how, arose the influence of the periodical press? Trace its developement to the end of the eighteenth century.

(6.) Sketch the career of the Duke of Wellington as a statesman.

University of Toronto.

THIRD YEAR.

ENGLISH.

HONORS AND SCHOLARSHIPS.

Examiners: { D. Wilson, LL.D.
J. A. Boyd, M.A.

"JULIUS CÆSAR;" ETYMOLOGY & SYNONYMS.

(1.) From what sources did Shakspeare draw the materials for this drama? Discuss the questions as to its hero, and the object with which it was written.

(2.) What anachronisms and deviations from historical accuracy do you note in the play?

(3.) "*Metellus.* Most high, most mighty and most puissant Cæsar,
Metellus Cimber throws before thy seat
An humble heart.—

 Cæsar. I must prevent thee, Cimber,
These *couchings* and these lowly courtesies
Might fire the blood of ordinary men;
And turn pre-ordinance and *first* decree
Into the *law* of children. Be not fond
To think that Cæsar bears such rebel blood
That will be thawed from the true quality
With that which melteth fools; I mean, sweet words,
Low-crook'd curt'sies and base, spaniel fawning.
Thy brother by decree is banished;
If thou dost bend, and pray, and fawn for him,
I spurn thee like a cur out of my way.
Know Cæsar doth not wrong; nor without cause
Will he be satisfied."

(*a.*) Point out all the figures, rhetorical and syntactical, which occur in this extract.

(*b.*) "Prevent," "ordinary," "quality," "satisfied:" Give groups of synonyms for each of these words, and distinguish between the shades of meaning of the words in each group.

(*c.*) What is the derivation of these words :— "Courtesies," "decree," "thawed," "banished," "wrong."

(*d.*) Discuss the various readings proposed in respect of the words in *italics* in the above passage.

(*e.*) Paraphrase in ordinary language the first nine lines of Cæsar's speech, so as to exhibit the meaning of the author.

(*f.*) How were the last two lines of Cæsar's speech originally written? To what celebrated criticism did they then give rise? What is their meaning as they now stand?

(4.) Give the origin and transmutations of meaning and application of the words in *italics* in the following passages :—

"What you would work me to, I have some *aim*."
"The *repealing* of my banished brother."
"To be *resolved* if Brutus so unkindly knocked."
"Be *content*; speak your grief softly."
"Every *nice* offence should bear *his* comment."
"Such *rascal counters*."
"Old men, fools, and children *calculate*."
"Upon my knees, I *charm* you."

(5.) Elucidate the force of the following phrases :— "*Conned by rote ;*" "our wildness shall *no whit* appear ;" "*my life is run his compass ;*" "*take thought*, and die for Cæsar."

(6.) Craik says : "It is evident that the characteristics of Julius Cæsar and his history had taken a deep hold of Shakspeare's imagination."

Is this a correct or incorrect position? Give reasons for your answer.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

THIRD YEAR.

HISTORY AND ETHNOLOGY:
HONORS AND SCHOLARSHIPS.

Examiners: { D. WILSON, LL.D.
{ J. A. BOYD, M.A.

***Answers to all the questions are not indispensable ; but FULL ANSWERS are required to as many as can be over-taken within the time.

1. Define all the causes, direct and indirect, which enabled Napoleon to establish the empire on the ruins of the French republic.

2. State the gains and losses, material and moral, of France and England, from the struggle terminated by the Treaty of Amiens.

3. D. Hamilton says of the war of England against France, begun in 1793, "In one aspect this was a war of principles ; in another, it was a war of self-defence ; but in both it was just and inevitable." Define what is implied in each of those assertions ; illustrate them by reference to details of the war ; and assign reasons for maintaining or rejecting the conclusions stated.

4. Name the leaders, and compare the circumstances and results, of the victories of Corunna and Toulouse.

ETHNOLOGY.

1. Define the system of classification of Retzius; and explain what is implied by designating the Anglo-Saxons: *orthognathic*]*dolicocephalæ*.

2. Explain the terms: *aptotic, paurosyllabic, polysynthetic, amalgamate* and *agglutinate*, as applied to languages; and specify an example of each.

3. Max Müller says: "We know that grammatical terminations, as they are now called, were originally independent words, and had their own purpose and meaning." Explain this, and illustrate it from English examples.

4. Schlegel asserts, as a fundamental proposition, that "Names of things and terms of expression are transitory; but the system of grammatical construction is permanent." How far is this compatible with the changes the English language has undergone from its original condition as an inflexional language?

5. The theory of a Pelasgic stock constituting the prehistoric occupants of all Italy, has been maintained by assuming that the *Tyrseni* of the north were Pelagi, on whom Rhætian *Rasena* intruded; and that the Œnotrii in the south were also Pelasgi, on whom the Hellenes intruded. Define what is implied in this theory, and discuss it in all its bearings.

6. Define the ethnological changes implied in the adoption of the names *France, England, Wales* and *Scotland*, for those applicable to the same countries when first invaded by the Romans.

7. Indicate the changes on the commercial and political institutions of Italy, subsequent to the dismemberment of the Roman empire; and show to what extent they are traceable to ethnological changes.

8. Trace all the ethnological changes which the Iberiam peninsula has undergone; and show the influence of those changes on subsequent history.

9. Give the derivation and strict meaning of the terms: aborigines, autochthones, prehistoric, primitive, allophylian, primeval.

10. Define and illustrate the difference between ethnological absorption and extinction.

University of Toronto.

THIRD YEAR.

FRENCH.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M. A.

I.

Subject for French composition: "Education and culture of the mind, necessary to women."

II.

Translate:

> Un effroyable cri, sorti du fond des flots,
> Des airs en ce moment a troublé le repos;
> Et, du sein de la terre, une voix formidable
> Répond en gémissant à ce cri redoubtable.
> Jusqu'au fond de nos cœurs notre sang s'est glacé;
> Des coursiers attentifs le crin s'est hérissé.
>
> RACINE'S PHEDRE, Act V., Scene VI.

1. Why no longer was the imperfect, but the preterite indefinite employed by the poet?

2. How many inversions? Point them out.

3. How many *hiatûs;* specify their effect.

III.

Translate:

JOAD.

> Jéhu, qu'avoit choisi sa sagesse profonde,
> Jéhu, sur qui je vois que votre espoir se fonde,

D'un oubli trop ingrat a payé ses bienfaits :
Jéhu laisse d'Achab l'affreuse fille en paix,
Suit des rois d'Israël les profanes exemples,
Du vil dieu de l'Egypte a conservé les temples ;
Jéhu, sur les hauts lieux enfin osant offrir
Un téméraire encens que Dieu ne peut souffrir,
N'a pour servir sa cause et venger ses injures
Ni le cœur assez droit, ni les mains assez pures.
Non, non : c'est à Dieu seul qu'il faut nous attacher,
Montrons Eliacin ; et, loin de le cacher,
Que du bandeau royal sa tête soit ornée :
Je veux même avancer l'heure déterminée,
Avant que de Mathan le complot soit formé.

RACINE, *Athalie*, Act III., Scene VI.

1. *Jéhu.* Who was he ?

2. *Sa sagesse profonde.* Give the antecedent of *sa*.

3. *Sur qui je vois.* When is *qui* exclusively said of persons ?

4. *D'Achab l'affreuse fille.* Name her.

5. *Suit des rois d'Israël.* How ?

6. *Du vil dieu de l'Egypte.* Name him.

7. *Sur les hauts lieux.* Explain.

8. *Qu'il faut nous attacher.* Give a more definite form, and destroy the pleonasm.

9. Point out the two most striking inversions.

IV.

Mais ce qu'un sage général doit le mieux connaître, c'est ses soldats et ses chefs : car de là vient ce parfait concert qui fait agir les armées comme un seul corps, ou, pour parler avec l'Écriture, "comme un seul homme :" *Egressus est Israel tanquam vir unus.* Pourquoi comme un seul homme ? Parce que sous un même chef, qui connaît et les soldats et les chefs comme ses bras et ses mains, tout est également vif et mesuré. C'est ce qui donne la victoire ; et j'ai ouï dire à notre grand prince qu'à la journée de Nordlingue, ce qui l'assurait du succès, c'est qu'il connaissait M. de Turenne, dont l'habileté consommée n'avait besoin d'aucun ordre pour faire tout ce qu'il fallait. Celui-ci publiait de son côté qu'il

agissait sans inquiétude, parce qu'il connaissait le prince, et ses ordres toujours sûrs. C'est ainsi qu'ils se donnaient mutuellement un repos qui les appliquait chacun tout entier à son action: ainsi finit heureusement la bataille la plus hasardeuse et la plus disputée qui fut jamais.

BOSSUET *Oraison Funèbre de Louis de Bourbon.*

1. *C'est ses soldats et ses chefs.* When is the demonstrative *ce* repeated before *est?* Why not *ce sont?*

2. *Car de là.* Suppress *de là*, and give the words referred to.

3. *Fait agir.* Resolve by a conjunction into a tense and mood. When is it that *faire* cannot be followed by an infinitive?

4. *J'ai ouï dire à notre grand prince.* Under what grammatical rule is this expression? Explain.

5. *Pour faire.* Resolve into a *definite* form.

6. *Et ses ordres toujours sûrs.* Fill up the ellipsis.

7. *Qui les appliquait.* Give the antecedent of *les*.

8. *Qui fut jamais.* Why in the indicative, after a superlative relative?

V.

History of the French literature in the 17th century (Chouquet's.)

1. Give a biographical sketch of Fontenelle, and state what are his true titles to literary glory.

2. Who has been surnamed, on account of his manly eloquence, the *Bossuet of the Protestant chair?* Characterise his style.

3. Write a short biographical notice of D'Aguesseau, and state in what he can be fully compared to Cicero. Give the character of his style.

4. When and where was for the first time played *L'Etourdi*, and *le Dépit Amoureux*, de Molière, and what are his best *chefs d'œuvre?*

University of Toronto.

THIRD YEAR.

FRENCH.
HONORS AND SCHOLARSHIPS.

Examiners : { James Forneri, LL.D.
{ Robert Sullivan, M.A.

Translate:

LADISLAS.

S'il est temps de patir, mon âme est toute prête.

VENCESLAS.

L'échafaud l'est aussi; portez-y votre tête :
Plus condamné que vous, mon cœur vous y suivra;
Je mourrai, plus que vous, du coup qui vous tûra,
Mes larmes vous en sont une preuve assez ample :
Mais à l'état, enfin, je dois ce grand exemple ;
A ma propre vertu, ce généreux effort;
Cette grande victime, à votre frère mort.
J'ai craint de prononcer, autant que vous d'entendre
L'arrêt qu'ils demandaient, et que j'ai dû leur rendre.
Pour ne vous perdre pas, j'ai long-temps combattu;
Mais, ou l'art de régner n'est plus une vertu,
Et c'est une chimère, aux rois, que la justice;
Ou régnant, à l'état je dois ce sacrifice.

ROTRON, *Venceslas*, act v., scene vi.

1. *Toute prête.* Explain the rule when *tout* in the sense of *quite* is declined and when not. Explain also its construction before *gens*.

2. *Plus condamné que vous.* Fill up the ellipsis.

3. *Vous y suivra.* Give the antecedent of *y*.

4. Fill up the ellipses in verses 3, 6, 7, 8.

5. *Vous en sont une preuve.* Suppress *en* and give the equivalent.

6. *J'ai craint.* Give the participles past not declined in the feminine.

7. *Leur rendre.* What does *leur* refer to?

8. *Que la justice.* What is this *que* called? Destroy the pleonasm in this line.

9. *Régnant.* Resolve it by a conjunction, tense, and mood.

10. *Je dois ce sacrifice.* Give the force.

II.

Translate :

Le théâtre, fertile en censeurs pointilleux,
Chez nous pour se produire est un champ périlleux,
Un auteur n'y fait pas de faciles conquêtes ;
Il trouve à le siffler des bouches toujours prêtes :
Chacun le peut traiter de fat et d'ignorant ;
C'est un droit qu'à la porte on achète en entrant.
Il faut qu'en cent façons, pour plaire, il se replie ;
Que tantôt il s'élève, et tantôt s'humilie ;
Qu'en nobles sentiments il soit partout fécond ;
Qu'il soit aisé, solide, agréable, profond ;
Que de traits surprenants sans cesse il nous réveille ;
Qu'il coure dans ses vers de merveille en merveille ;
Et que tout ce qu'il dit, facile à retenir,
De son ouvrage en nous laisse un long souvenir.
Ainsi la tragédie agit, marche, et s'explique.

BOILEAU, *l'Art Poetique*, chant ii.

1. *Fertile en censeurs pointilleux.* Turn it into a relative sentence.

2. *Pour se produire.* Resolve it into a definite sense by a conjunction.

3. *Un auteur n'y fait pas.* Give the antecedent of *y*.

4. *C'est un droit.* Suppress *ce*, and give the equivalent.

5. *Qu'à la porte on achète.* Give the force.

6. *Il faut.* Explain by examples the five constructions of this verb.

7. *Pour plaire.* Resolve it in a definite sense by a conjunction.

8. *Il se replic.* Give the force.

9. *Que tantôt il s'élève.* Destroy all the ellipses up to the last verse.

10. *Ainsi la tragédie.* Introduce a pleonasm.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

THIRD YEAR.

GERMAN.

Examiners : { JAMES FORNERI, LL.D.
  ROBERT SULLIVAN, M.A.

I.

Translate into German :

The celebrated Doerfling, the son of a Bohemian peasant, learned in his youth the business of a tailor; he afterwards changed the needle for the sword, and entered the service of several heroes, and was appointed at last, by the grand elector, who knew how to appreciate and reward merit of any kind, whatever, Major-General and Governor of the Duchy of Ulterior Pomerania.

II.

GRAMMATICAL QUESTIONS.

1. Mention the peculiarity of the auxiliary verbs of mood, and give an example.

2. Explain the difference between German intransitive and neuter verbs ?   Give examples.

3. By what case do you express the state or condition of a neuter verb, and the action of an intransitive verb?

4. What auxiliary does an intransitive verb take when the manner of moving is expressed?

5. What does *da* combined with a preposition and followed by *dass* represent?   Translate, by *reading much he became learned.*

6. When are *halb, ganz* to be declined and when not?

7. How is the passive voice of neuter verbs expressed in German?

8. Translate, *he is feared ; the child is dressed*, examplifying both the passive and neuter verbs.

9. Explain *Oratio obliqua*, and *constructio ad sensum*, by examples.

III.

SET INTO GRAMMATICAL CONSTRUCTION THE FOLLOWING LINES.

Translate :

Juſt. Aber ein perfekter Läufer iſt er, das iſt gewiß. Wenn ihm ver Herr fünfzig Schritte vorgab, ſo konnte er ihn mit ſeinem beſten Renner nicht einholen. Fritz hingegen kann dem Galgen tauſend Schritte vorgeben, und ich wette mein Leben, er holt ihn ein.

IV.

Translate :

Der Wirth. Hat es Ihr das gnädige Fräulein nicht erzählt? — Als ich Sie, mein ſchönes Kind, unten in der Küche verließ, ſo kam ich von ungefähr wieder hier in den Saal —
Franciska. Von ungefähr, in der Abſicht, ein wenig zu horchen.
Der Wirth. Ei, mein Kind, wie kann Sie das von mir denken? Einem Wirthe läßt nichts übler, als Neugierde— Ich war nicht lange hier, ſo prellte auf einmal die Thüre bei dem gnädigen Fräulein auf. Der Major ſtürzte heraus, das Fräulein ihm nach; beide in einer Bewegung, mit Blicken, in einer Stellung—ſo was läßt ſich nur ſeben. Sie ergriff ihn; er riß ſich los; ſie ergriff ihn wieder. Tellheim!—Fräulein! laſſen Sie mich!—Wohin? So zog er ſie bis an die Treppe? Mir war ſchon bange, er würde ſie mit hinabreißen. Aber er wnd ſich noch los.

LESSING, *Minna von Barnhelm*, p. 52.

1. *Unten in der Küche verliess.* What part of the speech is *unten* ?

2. *Von ungefähr in der absicht.* Give a synonym of *in der absicht* and fill up the ellipsis.

3. *Das von mir denken?* Suppre das and give the equivalent.

4. *Einem Wirthe lässt, &c.* Give a synonym to *lässt.*

5. *Ich war nicht lange hier,* add a verb.

6. *Das Fräulein ihm nach,* fill up the ellipsis.

7. *Beide in einer Bewegung, mit Blicken, in einer Stellung.* Add the complement.

8. *So was lässt sich nur sehen.* Give the force.

9. *Er riss sich los.* What case or cases does *los* as adjective govern?

10. *Wohin?* Add a verb.

11. *Mir war schon bange.* Give a synonym of this expression by a single word.

12. *Er würde sie mit.* Add the regimen to *mit.*

V.

GERMAN LITERATURE, (GOSTICK'S.)

1. What was the 5th period with respect to poetry?

2. What error does Lessing expose in his "Lackoon"?

3. What production was once esteemed as the German "Vicar of Wakefield," and by whom was it written?

4. Who was considered the greatest writer of the 6th period? Name some of his best works.

GERMAN.

FOR HONORS.

Examiners : $\left\{ \begin{array}{l} \text{James Forneri, LL.D.} \\ \text{Robert Sullivan, M.A.} \end{array} \right.$

I.

Subject for German composition :

<p style="text-align:center">" The Horse."</p>

Within thirty lines at least.

II.

Und eilends gingen die Abderiten hin, und machten ein Gesetz : daß kein Abderitensohn hinfort weiter als bis an den Korinthischen Isthmus, länger als ein Jahr, und anders als unter der Aufsicht eines bejahrten Hofmeisters von Altabderitischer Abkunft, Denkart und Sitte, sollte reisen dürfen. „Junge Leute müssen zwar die Welt sehen, sagte das Decret : aber eben darum sollen sie sich an jedem Orte nicht länger aufhalten, als bis sie alles, was mit Augen da zu sehen ist, gesehen haben. Besonders soll der Hofmeister genau bemerken, was für Gasthöfe sie angetroffen, wie sie gegessen, und wie viel sie bezahlen müssen; damit ihre Mitbürger sich in der Folge diese ersprießlichen Geheimnachrichten zu nutze machen können. Ferner soll (wie das Decret weiter sagt), zu Ersparung der Unkosten eines allzu langen Aufenthalts an Einem Orte, der Hofmeister dahin sehen, daß der junge Abderit in keine unnöthigen Bekanntschaften verwickelt werde.

WIELAND'S *Geschichte der Abderiten,* chap. ix.

1. *Ein Gesetz.* Add a relative and a verb, on which the following *Dass* may depend.

2. *Sollte reisen dürfen.* State what rule is applicable to these words.

3. *Aber eben darum.* Suppress *darum* and give the equivalent.

4. *Da zu sehen ist.* Explain the rule.

5. *Sie angetroffen . .... sie gegessen.* Give the antecedent of *sie* and fill the ellipses.

5. *Zu nutze machen.* Compress it into a verb.

7. *Ferner soll.* With what infinitive can *sollen* be used elliptically? I shall do it, *ich soll es thun;* is it good German? If not correct it.

8. *Dahin sehen.* What does *dahin* refer to? What figure do you perceive in this word?

9. *Vêrwickelt werde.* What tense and what mood is *werde?*

10. Fill up all the ellipses not mentioned before.

III.

Translate:

Orest.

Wenn sie dem Menschen frohe That bescheren,
Daß er ein Unheil von den Seinen wendet,
Daß er sein Reich vermehrt, die Grenzen sichert,
Und alte Feinde fallen oder fliehn;
Dann mag er danken! denn ihm hat ein Gott
Des Lebens erste, letzte Lust gegönnt.
Mich haben sie zum Schlächter auserkoren,
Zum Mörder meiner doch verehrten Mutter,
Und eine Schandthat schändlich rächend, mich
Durch ihren Wink zu Grund' gerichtet. Glaube,
Sie haben es auf Tantal's Haus gerichtet,
Und ich, der Letzte, soll nicht schuldlos, soll
Nicht ehrenvoll vergehn.

GOETHE's *Iphigenie auf Tauris,* Act ii., Scene i.

1. *Wenn sie dem Menschen,* &c. Give the antecedent of *sie.*

2. Fill up all the ellipses of this extract.

3. *Von den Seinen.* Suppress the capital initial S in *Seinen* and add a noun.

4. *Dann mag er danken.* *Danken*, whom?

5. *Dann ...... denn.* Compare.

6. *Zum Schläehter auserkoren.* Give the rule applicable to this expression.

7. *Schändlieh räehend.* Express the adverbial idea of *Sehändlich* by *Weise*, and resolve *räehend* by a conjunction.

8. *Ich, der Letzte.* Turn it into a relative sentence.

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University of Toronto.

THIRD YEAR.

ITALIAN.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.

GRAMMATICAL QUESTIONS.

1. In what are the verbs *fare* and *stare* idiomatically employed?

2. Translate, *I am neither thirsty nor hungry.*

3. When is *il che* used?

4. Point out the difference between *questi, cotesti,* and *quegli.*

5. When is the definite article omitted?

6. What is the plural of *mille* and that of *cento?*

7. What numbers are employed for the date of the month?

8. Translate, *It was last week that I spoke to your friend.*

9. When is *mezzo* invariable?

10. How is *ago* expressed?

Translate into English:

GIA. Che strepito è questo? Che piazzate son queste?

LEO. Signora, le piazzate, non le fo io: le fanno quelli che si burlano de' galant' uomini, che mancano di parola, che tradiscono sulla buona fede.

GIA. Chi è il reo? Chi è il mancatore? (*Con caricatura.*)

FUL. Parlate voi. (*A Filippo.*)

FIL. Favoritemi di principiar voi. (*A Fulgenzio.*)

FUL. Orsù, ci va del mio in quest' affare. Poichè il diavolo mi ci ha fatto entrare, a tacere ci va del mio, e se non sa parlare il signore Filippo, parlerò io. Sí, signora: ha ragione il signor Leonardo di lamentarsi. Dopo avergli dato parola che il signor Guglielmo non sarebbe venuto con voi, mancargli, farlo venire condurlo in villa, è un' azione poco buona, e un trattamento incivile

GIA. Che dite voi, signor padre?

FIL. Ha parlato con voi rispondete voi.

GIA. Favorisca in grazia, signor fulgenzio: con qual autorità pretende il signor Leonardo di comandare in casa degli altri?

LEO. Con quell' autorità che un amante...

GIA. Perdoni, ora non parlo con lei. (*A Leonardo.*) Mi risponda il signor Fulgenzio. Come ardisce il signor Leonardo pretendere da mio padre e da me che non si tratti chi pare a noi, e non si conduca in campagna chi a lui non piace?

LEO. Voi sapete benissimo...

GIA. Non dico a lei; mi risponda il signor Fulgenzio.

FIL. (Oh! non sarà vero degli amoretti, non parlerebbe così.)

FUL. Poichè volete che dica io, dirò io. Il signor Leonardo non direbbe niente, non pretenderebbe niente se non avesse intenzione di pigliarvi per moglie.

GIA. Come il signor Leonardo ha intenzione di volermi in isposa? (*A Fulgenzio.*)

LEO. Possibile che vi giunga nuovo?

GIA. Perdoni. Mi lasci parlar col signor Fulgenzio. (*A Leonardo.*) Dite, signore, con qual fondamento potete voi asserirlo? (*A Fulgenzio.*)

FUL. Col fondamento che io medesimo, per commissione del signor Leonardo, ne ho avanzata testè a vostro padre la proposizione.

LEO. Ma veggendomi sì maltrattato...

GIA. Di grazia s' accheti. Ora non tocca a lei ; parlerà quando toccherà a lei. (*A Leonardo.*) Che dice su di ciò il signor padre ?

GOLDONI, *La Villeggiatura*, Atto iii., Scena xiv.

1. *Che piazzate.* Give the force.

2. *Favoritemi di principiar voi.* Turn *favoritemi* into a deprecatory adverb, and *principiar* into an imperative.

3. *Orsù.* Give a synonym in French.

4. *Ci va del mio in quest' affare.* Translate it into French, adding a noun to *mio.*

5. *Mi ci ha fatto entrare.* Suppress *ci* and give the equivalent.

6. *A tacere.* Resolve it by a conditional conjunction, tense, and mood.

7. *Dopo avergli dato parola.* Resolve by a conjunction, tense and mood, adding the subject.

8. *Che un amante.* Supply the reticence.

9. *Da mio padre.* Why not *dal mio padre* ?

10. *Non si tratti chi.* Resolve *chi.*

11. *Chi a lui non piace ?* What does *a lui* refer to ?

12. *Degli amoretti.* Prefix a governing word.

13. *Dica, dirò.* Change *dire* into *parlare,* and conjugate.

14. *In isposa.* Why *in isposa* and not *sposa ?*

15. *Possibile che, &c.* Supply verb and subject.

16. *Asserirlo.* Suppress *lo* and add the equivalent.

17. *Ne ho avanzata, &c.* What does *ne* refer to ?

18. *Ora non tocca a lei.* Give the force and translate it into French.

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THIRD YEAR.

APPLIED CHEMISTRY.

Examiner: Henry Croft, D.C.L.

1. How may the presence of organic matter in the air be detected?

2. What salts of lime can be easily removed from water, and how?

3. Explain the difference between spring, river, and rain water.

4. Give the preparation of nitric acid. How is the residue utilised?

5. Give the preparation of alum, and its uses.

6. Describe the manufacture of glue, and the uses of the residue.

7. Describe the extraction of lead from galena.

8. Describe the manufacture of shot.

9. Describe the process of alkalimetry.

10. What are the uses of chlorine in the arts, and in what forms is it employed?

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THIRD YEAR.

APPLIED CHEMISTRY.

HONORS AND SCHOLARSHIPS.

Examiner: HENRY CROFT, D.C.L.

1. Describe the preparation of common salt from brine springs, and from sea water. What other salts are obtained, and how?

2. Describe the manufacture of gunpowder, and its action.

3. What salts of barium and strontium are used in the arts? How are they prepared?

4. Describe the method of refining sugar.

5. What property renders copper ineligible for castings? How is the objection obviated.

6. Mention the economical uses of coal tar.

7. Describe the manufacture of candles of all kinds.

8. Describe the process of block printing as applied to calico.

9. Give the different methods of preserving food, and the principles on which they depend.

10. Give an outline of the processes by which gutta percha is utilised.

IMAGE EVALUATION
TEST TARGET (MT-3)

6"

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THIRD YEAR.

NATURAL HISTORY.

Examiners: { REV. PROF. HINCKS, F.L.S.
T. J. COTTLE, ESQ.

1. Of what parts does an endogenous vascular bundle consist, and in what order do they occur in reference to the centre and circumference of the stem?

2. In the stem of a vine what does the tendril represent, and what is the real nature of what appears to be the next internode?

3. Give some account of the laws of Phyllotaxis.

4. What is the real explanation of the organs of the flower called nectaries by the Linnean botanists?

5. Order Orchidaceæ, its characters, examples of conspicuous plants of this country—prevailing habits of tropical orchidaceae?

6. Order Lobeliaceæ, character, properties, native examples?

7. Show the points of agreement and difference between the Palliobranchiate and Lamellibranchiate Mollusks: the means by which these animals procure food, and the tendencies as to the development of particular parts which are most deserving of attention.

8. Give a sketch of the arrangement of the class Arachnida, especially of the family Arancidæ. What characters are specially important in discriminating them?

9. Give an account of the structure and mode of arangement of the class Pisces.

10. Reptilia Ord: Chelonia—the general structure, the families, with their peculiar habits.

11. Fissirostres. What are the characteristic distinctions of this division of birds? Enumerate the families.

12. Mammalia. Arrange the class, giving the principal structural characters.

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ANNUAL EXAMINATIONS: 1864.

THIRD YEAR.

NATURAL HISTORY.

HONORS AND SCHOLARSHIPS.

Examiners: { REV. PROF. HINCKS, F.L.S.
               T. J. COTTLE, ESQ.

1. The vegetable cell, its substance, its natural figure, its contents when in a living active state, causes which influence its figure, difference between cells and vessels and the degree of importance attached to it, principal contents of cells in their more advanced state.

2. How may the divisions called sub-kingdoms — well known in the animal kingdom — be applied with advantage to the vegetable kingdom? Name the three proposed sub-kingdoms, and give the classes, aliances, and orders in the lowest.

3. Order Zanthoxylaceae—characters, and affinities, properties—representation in North America.

4. Sub-kingdom Protozoa, its characteristics. Examination of the reasons for suppressing it. The classes and further sub-divisions as far as well established.

5. The orders of the class Crustacea: special account of Cirrhopoda, their relations to other Crustacea, their structural peculiarities, their leading variations, the situations inhabited by various species.

6. What is the distinguishing character of the great family Curculionidæ? How are their larvæ frequently very dis-

tructive? Give examples. What circumstance connects them with the family Longicornes? What objection may justly be made to the common practice of placing Coleoptera at the head of the class Insecta?

7. Describe the structural peculiarities of the genus Apteryx in the family Struthionidæ.

8. Various applications of the mammalian structure to animals inhabiting water. Distinguish the Cetacea—the family of the seals—the otters, shewing the peculiarities of each.

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THIRD YEAR.

METAPHYSICS AND ETHICS.

Examiner: REV. PROFESSOR MURRAY.

REID'S INTELLECTUAL POWERS, STEWART'S MORAL & ACTIVE POWERS.

1. Explain the terms *sensation, perception* and *consciousness,* in the distinctive senses in which they are employed by Reid.

2. What is the theory of perception which Reid regarded as the common doctrine of philosophers, and which he made it the chief aim of his own philosophy to overthrow?

3. State and criticise Reid's account of Plato's theory of perception.

4.   *a.*   What is the doctrine which Berkeley intended to establish in his *New Theory of Vision?*

    b.   State briefly Berkeley's general theory with regard to the knowledge and the existence of matter.

5. What does Reid understand by *common sense?*

6.   *a.*   State any of the grounds on which Reid considers it impossible to prove from induction the principle, that whatever begins to exist *must* have a cause if its existence.

    b.   By whom was this principle questioned?

7.   *a.*   What three phenomena does Stewart mention as characteristic of *appetites ?*

      b.   What are the three propensities to which he gives the name of appetites ?

      c.   What other propensities does he mention as possessing similar characteristics to those of the appetites ?

8.   *a.*   What is the distinction between *emulation* and *envy ?*

      b.   By whom was this distinction overlooked ?

9. What are the several theories of Hobbes, Cudworth and Hutcheson with regard to our consciousness of right and wrong ?

10. State explicitly the opposite doctrines of those who maintain and of those who deny the liberty of the will, mentioning some of the grounds on which each is supported.

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THIRD YEAR.

POLITICAL ECONOMY.

Examiner : Rev. James Beaven, D.D.

SENIOR.

1. *a.* What different opinions as to what constitutes wealth ? Which does Senior adopt ?

   b. Give his objection to those which he rejects, and his answer to the objection to that which he adopts.

2. Define *products, services,* and *commodities,* and explain and illustrate the application of those terms.

3. " The fourth class of monopolies exists where production must be assisted by natural agents, limited in number and varying in power, re-paying with less and less relative assistance every increase in the amount of the labour and abstinence bestowed on them."

Explain in detail the application of this definition to the monopoly of land.

4. State the nature of rent and explain the causes on which its proportionate amount depends.

5. Discuss the effects, pecuniary and moral, of the absence of an English landlord from his estate.

6. Explain and illustrate the effect produced on the rate of remuneration of any kind of labour by the facility or difficulty of learning the particular business.

BURLAMAQUI.

1. Give the primary notion of *right*, and its definition in its more general sense; and exhibit the process by which Burlamaqui passes from one to the other, and shews that man is capable of *right*.

2. State those grounds of the right of sovereignty which B. regards as inadequate, with his reasons; and establish, after him, the true grounds of that right.

3. State, after B., the essential distinction between constraint and obligation.

4. What functions does B. respectively attribute to the moral sense and to reason in the discovery of right and wrong? What other name does he give to the first of these, and why? Compare his opinions with those of other writers on this subject.

5. How does B. determine the question, whether there is an absolute right and wrong, independent of the will of God? Give his grounds and compare his views with those of other writers.

6. *a.* What does B. understand by the *sanction* of laws? And why does he consider it necessary?

   b. What two sanctions does he suppose to be attached to the laws of nature? Why does he consider the first insufficient? And on what grounds does he rest the second?
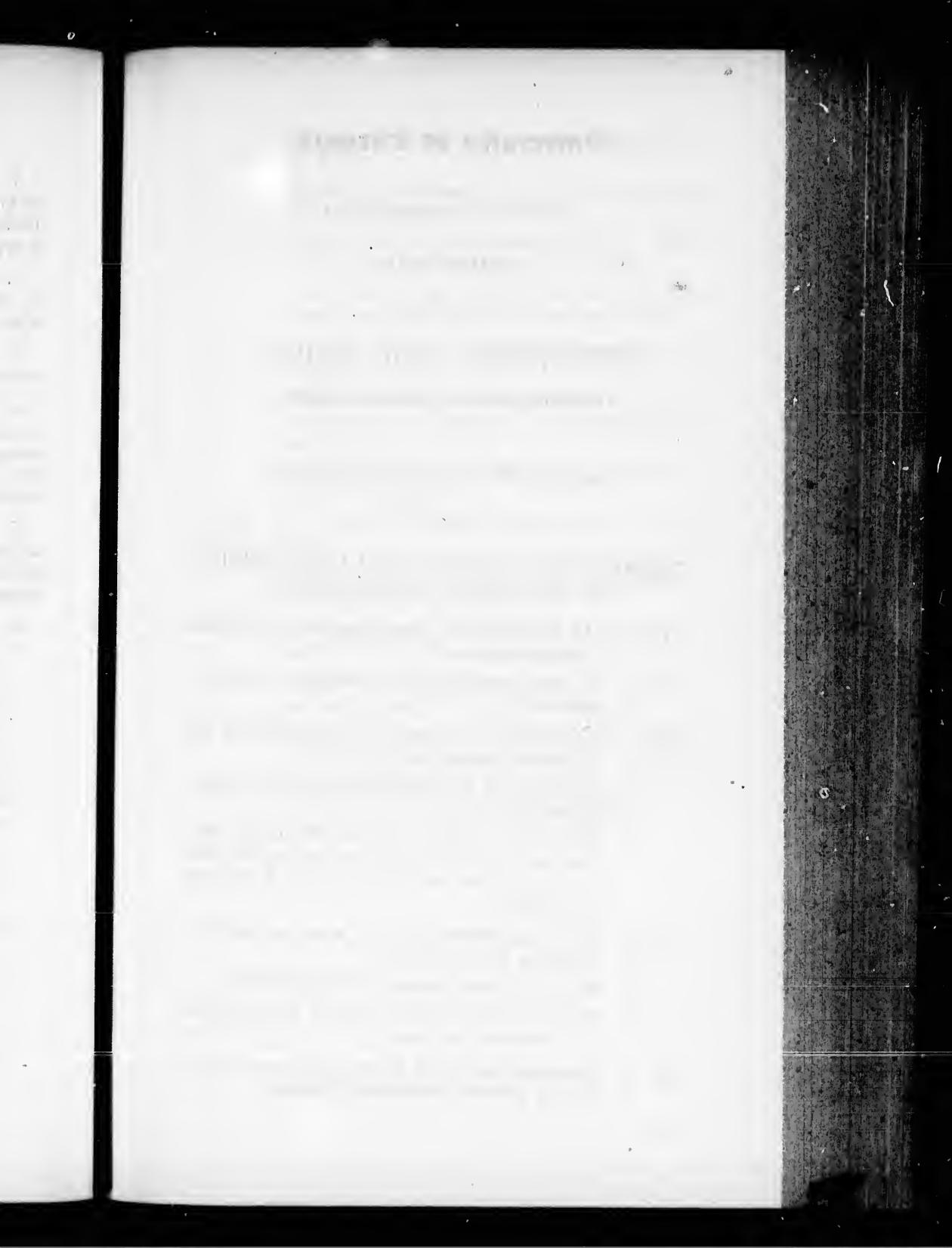
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ANNUAL EXAMINATIONS: 1864.

THIRD YEAR.

METAPHYSICS AND ETHICS.
HONORS AND SCHOLARSHIPS.

Examiner: REV. PROFESSOR MURRAY.

TENNEMANN'S HISTORY AND PHILOSOPHY AND STEWART'S DISSERTATION.

1.   *a.*   After whom were the Thomists and Scotists respectively named?

    b.   In what century did the founder of these sects flourish?

2.   *a.*   About what time and at what university did William of Occam teach?

    b.   What logical principle did he bring into prominence?

    c.   Which side did he take in the controversy between the Realists and Nominalists, and what was his doctrine with regard to the foundation of morality?

3.   *a.*   To what country and to what century did Giordano Bruno belong?

    b.   State the general nature of his philosophy.

    c.   Of what ancient systems may it be considered as a refined reproduction?

4.   *a.*   State any thing you know with regard to the life and personal character of Spinoza.

b. Give a brief account of the system expounded in his Ethics.

5. *a.* What are the three parts into which Hegel divides philosophy?

     b. What are the two schools into which the Hegelians separated after their master's death?

     c. State some of the questions on which the two schools separated and the side taken by each.

6. *a.* State the doctrine of Hobbes with regard to the origin of society.

7. *b.* Mention some of the circumstances of his time which may have influenced the development of that doctrine.

     c. On what points can his influence on Locke's system be recognised?

State and criticise Clarke's demonstration of the existence of God.

8. *a.* What was Hartley's theory with regard to the action of matter on mind?

     b. On what single principle did he attempt to explain all the mental phenomena?

9. *a.* From what English philosopher did Condillac derive the main principle of his theory?

     b. Point out the connection of the English philosopher's system with that to which it was reduced by Condillac; and defend your answer to the question, whether the reduction is logical.

10. State and criticise Stewart's estimate of Kant.

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ANNUAL EXAMINATIONS : 1864.

THIRD YEAR.

METAPHYSICS AND ETHICS.
HONORS AND SCHOLARSHIPS.

Examiners: { Rev. James Beaven, D.D.
{ Rev. Professor Murray.

MACKINTOSH.

1. State the radical distinction between physical and moral sciences.

2. Explain from Grotius the general principles of morals which prevailed immediately after the close of the scholastic period.

3. What was the speculative question which formed the ground of dispute between Fenelon and Bossuet, and what views did each hold? Give the opinions of any other writers on the same subject.

4. Give some account of the views of Jonathan Edwards, and note his coincidences with other philosophers.

5. What is the relation of Hutcheson to Scottish speculative philosophy?

6. Give M.'s character of Paley, and state what principle M. borrowed from him.

7. "Which last form of expression has so close a resemblance to the language of Kant, that it should have protected the latter from the imputation of writing jargon." Explain.

8. Explain Brown's objection to the use of the word *Association* in reference to ideas, and show the more general principle on which the objection is founded.

9. Notice the leading points on which M. may be regarded as having added to moral philosophy.

LOCKE I., WITH COUSIN'S CRITIQUE.

1. What is the objection, which Cousin urges, against beginning an enquiry into the human understanding with the question discussed in the first book of Locke's Essay ?

2.   *a.* What does Locke regard as the chief argument for the existence of innate principles ?

    b. By what considerations does he answer this argument with reference to the two speculative principles, *whatever is, is,* and, *it is impossible for the same thing to be and not to be.*

3. State Locke's argument to prove that the idea of God is not innate.

4.   *a.* What is the distinction, on which Cousin insists, between the *logical* and the *chronological* order of our ideas ?

    b. Illustrate this distinction with reference to the idea of *space.*

5. Defend your answer to the question, whether Locke's system may be logically reduced to sensualism.

1. *a.* ...
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    b. ...
rule...

2. " I...
Political...

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THIRD YEAR.

POLITICAL ECONOMY.

Examiner: Rev. James Beaven, D.D.

WHATELEY.

1. *a.* Explain and illustrate Whateley's views as to the propriety of appealing to scripture as a criterion of scientific truth.

    b. Give an instance in which he has observed this rule.

2. "I wish for my own part there was no such thing as Political Economy." Why?

3. Shew the influence of emulation in the promotion of continual improvement.

4. "In fact there is no good reason for calling the condition of the rudest savages a state of nature." Support this assertion.

5. Show how differences of religion may affect national character and prosperity.

6. Explain the special necessity and use of definitions in Political Economy.

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

GREEK.

Examiners: { REV. JOHN McCAUL, LL.D.
{ THOMAS MOSS, M.A.

I.

Translate:

AI. πολλῶν ἕκατι τήνδε σοι δοῦναι χάριν,
γύναι, πρόθυμός εἰμι, 'πρῶτα μὲν θεῶν,
ἔπειτα παίδων ὧν ἐπαγγέλλει γονάς.
ἐς τοῦτο γὰρ δὴ φροῦδός εἰμι πᾶς ἐγώ.
οὕτω δ' ἔχει μοι· σοῦ μὲν ἐλθούσης χθόνα,
πειράσομαί σου προξενεῖν δίκαιος ὤν.
τοσόνδε μέντοι σοι προσημαίνω, γύναι·
ἐκ τῆσδε μὲν γῆς οὔ σ' ἄγειν βουλήσομαι,
αὐτὴ δ' ἐάνπερ εἰς ἐμοὺς ἔλθῃς δόμους,
μενεῖς ἄσυλος, κοὔ σε μὴ μεθῶ τινι.
ἐκ τῆσδε δ' αὐτὴ γῆς ἀπαλλάσσου πόδα·
ἀναίτιος γὰρ καὶ ξένοις εἶναι θέλω.

MH. ἔσται τάδ'· ἀλλὰ πίστις εἰ γένοιτό μοι
τούτων, ἔχοιμ' ἂν πάντα πρὸς σέθεν καλῶς.

AI. μῶν οὐ πέποιθας; ἢ τί σοι τὸ δυσχερές;

MH. πέποιθα· Πελίου δ' ἐχθρός ἐστι μοι δόμος
Κρέων τε. τούτοις δ' ὁρκίοισι μὲν ζυγεὶς
ἄγουσιν οὐ μεθεῖς ἂν ἐκ γαίας ἐμέ,
λόγοις δὲ συμβὰς καὶ θεῶν ἐνώμοτος
φίλος γένοι' ἂν κἀπικηρυκεύμασι
οὐκ ἂν πίθοιο· τἀμὰ μὲν γὰρ ἀσθενῆ,
τοῖς δ' ὄλβος ἐστὶ καὶ δόμος τυραννικός.

AI. πολλὴν ἔλεξας, ὦ γύναι, προμηθίαν·
ἀλλ᾽ εἰ δοκεῖ σοι δρᾶν τάδ᾽, οὐκ ἀφίσταμαι.
ἐμοί τε γὰρ τάδ᾽ ἐστὶν ἀσφαλέστατα,
σκῆψίν τιν᾽ ἐχθροῖς σοῖς ἔχοντα δεικνύναι,
τὸ σόν τ᾽ ἄραρε μᾶλλον· ἐξηγοῦ θεούς.

EURIPIDES, *Medea*, 720-745.

1. θεῶν. What is the construction?

2. παίδων ὧν. To what limitations is the attraction of the relative subject?

3. By what parts of the verb must οὐ μὴ be followed? With what difference in signification?

4. αὐτή. Give the force. Quote a passage in which *ipse* is similarly used.

5. ἀπαλλάσσου πόδα. What is the construction?

6. Give different readings of line: ἄγουσιν οὐ, &c.

7. ἐνώμοτος......οὐκ ἂν πίθοιο. Give a different reading, and translate accordingly.

8. ἐξηγοῦ. Give corresponding Latin phrase.

9. What idea did the Greeks connect with τύραννος?

II.

1. What extant specimen of a complete trilogy?

2. Explain the terms: χορὸν διδόναι, ἐκκύκλημα, παρασκήνια, ἔξαρχος, θυμέλη, οὐδὲν προς Διόνυσον.

3. Give a scale of the Trochaic Tetrameter Catalectic.

4. What is meant by the *quasi-cæsura?*

5. Account for the popularity of Euripides in the middle ages.

III.

Translate:

῾Η τε τῶν ἐπιτηδείων παρακομιδὴ ἐκ τῆς Εὐβοίας, πρότερον ἐκ τοῦ ᾿Ωρωποῦ κατὰ γῆν διὰ τῆς Δεκελείας θᾶσσον οὖσα, περὶ Σούνιον κατὰ θάλασσαν πολυτελὴς ἐγίγνετο· τῶν τε πάντων ὁμοίως ἐπακτῶν ἐδεῖτο ἡ πόλις, καὶ ἀντὶ τοῦ πόλις εἶναι φρούριον κατέστη. πρὸς γὰρ τῇ ἐπάλξει τὴν μὲν ἡμέραν κατὰ διαδοχὴν οἱ ᾿Αθηναῖοι φυλάσσοντες, τὴν δὲ νύκτα καὶ ξύμπαντες πλὴν τῶν

ἱππέων, οἱ μὲν ἐφ᾽ ὅπλοις που, οἱ δ᾽ ἐπὶ τοῦ τείχους, καὶ
θέρους καὶ χειμῶνος ἐταλαιπωροῦντο. μάλιστα δ᾽ αὐτοὺς
ἐπίεζεν ὅτι δύο πολέμους ἅμα εἶχον, καὶ ἐς φιλονεικίαν
καθέστασαν τοιαύτην ἣν πρὶν γενέσθαι ἠπίστησεν ἄν τις
ἀκούσας. τὸ γὰρ αὐτοὺς πολιορκουμένους ἐπιτειχισμῷ
ὑπὸ Πελοποννησίων μηδ᾽ ὣς ἀποστῆναι ἐκ Σικελίας,
ἀλλ᾽ ἐκεῖ Συρακούσας τῷ αὐτῷ τρόπῳ ἀντιπολιορκεῖν,
πόλιν οὐδὲν ἐλάσσω αὐτὴν γε καθ᾽ αὑτὴν τῆς Ἀθηναίων,
καὶ τὸν παράλογον τοσοῦτον ποιῆσαι τοῖς Ἕλλησι τῆς
δυνάμεως καὶ τόλμης, ὅσον κατ᾽ ἀρχὰς τοῦ πολέμου οἱ
μὲν ἐνιαυτόν, οἱ δὲ δύο, οἱ δὲ τριῶν γε ἐτῶν, οὐδεὶς πλείω
χρόνον, ἐνόμιζον περιοίσειν αὐτούς, εἰ οἱ Πελοποννήσιοι
ἐσβάλοιεν ἐς τὴν χώραν, ὥστε ἔτει ἑπτακαιδεκάτῳ μετὰ
τὴν πρώτην ἐσβολὴν ἦλθον ἐς Σικελίαν, ἤδη τῷ πολέμῳ
κατὰ πάντα τετρυχωμένοι, καὶ πόλεμον οὐδὲν ἐλάσσω
προσανείλοντο τοῦ πρότερον ὑπάρχοντος ἐκ Πελο-
ποννήσου.

<div align="right">Thucydides, B. VII., ch. 28.</div>

1. Ὠρωποῦ. State its geographical position.

2. κατὰ γῆς. What other reading?

3. ἐφ᾽ ὅπλοις, &c. What is the construction?

4. Distinguish the meanings of ἐπί according to the case
it governs.

5. Parse καθέστασαν, ἀποστῆναι, ἐλάσσω, περιοίσειν,
προσανείλοντο.

6. Δεκελείας. What peculiar privilege was accorded to
the Deceleans during the Peloponnesian war? For what
reason?

<div align="center">IV.</div>

1. Give the names of the five parts of Syracuse. By
what Roman general was it taken?

2. What incident is said to have inspired Thucydides
with the desire of becoming a historian?

3. Why was he banished?

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

LATIN.

Examiners: { REV. JOHN MCCAUL, LL.D.
{ THOMAS MOSS, M.A.

I.

Translate:

Da testem Romæ tam sanctum, quam fuit hospes
Numinis Idæi; procedat vel Numa vel qui
Servavit trepidam flagranti ex æde Minervam:
Protinus ad censum, de moribus ultima fiet
Quæstio: "quot pascit servos? quot possidet agri
Jugera? quam multa magnaque paropside cœnat?"
Quantum quisque sua nummorum servat in arca,
Tantum habet et fidei.   Jures licet et Samothracum
Et nostrorum aras; contemnere fulmina pauper
Creditur atque Deos, Dis ignoscentibus ipsis.
Quid? quod materiam præbet causasque jocorum
Omnibus hic idem, si fœda et scissa lacerna,
Si toga sordidula est et rupta calceus alter
Pelle patet: vel si, consuto vulnere, crassum
Atque recens linum ostendit non una cicatrix.
Nil habet infelix paupertas durius in se,
Quam quod ridiculos homines facit.

JUVENAL, *Sat. III.*, 137-153.

1. Write explanatory notes on *hospes Numinis Idæi, qui servavit* to *Minervam*, and *et Samothracum* to *aras.*

2. *Jures.* Why in subjunctive? Distinguish *æde* and *ædibus, sordida* and *sordidula, alter* and *alius.*

3. Give a list of Latin authors of Epic, Dramatic, Lyric, and Satiric poetry, introducing dates where you can.

II.

Translate:

> Consumptis opibus vocem, Damasippe, locasti
> Sipario, clamosum ageres ut Phasma Catulli.
> Laureolum velox etiam bene Lentulus egit,
> Judice me dignus vera cruce.   Nec tamen ipsi
> Ignoscas populo : populi frons durior hujus,
> Qui sedet et spectat triscurria patriciorum,
> Planipedes audit Fabios, ridere potest qui
> Mamercorum alapas.   Quanti sua funera vendant,
> Quid refert?   Vendunt nullo cogente Nerone,
> [Nec dubitant celsi prætoris vendere ludis.]
> Finge tamen gladios inde, atque hinc pulpita pone :
> Quid satius ?   Mortem sic quisquam exhorruit, ut sit
> Zelotypus Thymeles, stupidi collega Corinthi?
> Res haud mira tamen, citharœdo Principe, mimus
> Nobilis.   Hæc ultra quid erit, nisi ludus ?   Et illud
> Dedecus urbis habes: nec mirmillonis in armis,
> Nec clypeo Gracchum pugnantem aut falce supina.

JUVENAL, *Sat. VIII.*, 185-201.

Write explanatory notes on *sipario, Phasma Catulli, Laureolum, planipedes, prætoris ludis, pulpita, citharœdo Principe, hæc ultra quid erit, nisi ludus, mirmillonis* and *falce supina.*

III.

Translate:

> Nullas Germanorum populis urbes habitari satis notum est ; ne pati quidem inter se junctas sedes. Colunt discreti ac diversi, ut fons, ut campus, ut nemus placuit. Vicos locant non in nostrum morem, connexis et cohærentibus ædificiis : suam quisque domum spatio circumdat, sive adversus casus ignis remedium, sive inscitia ædificandi.   Ne cæmentorum quidem apud illos aut tegularum usus : materia ad omnia utuntur informi, et citra speciem aut delectationem.   Quædam loca diligentius illinunt terra ita pura ac splendente, ut picturam ac lineamenta colorum imitentur. Solent et subterraneos

specus aperire, eosque multo insuper fimo onerant, suf-
fugium hiemi et receptaculum frugibus, quia rigorem
frigorum ejusmodi locis molliunt. Et si quando hostis
advenit, aperta populatur, abdita autem et defossa aut
ignorantur, aut eo ipso fallunt quod quærenda sunt.

TACITUS, *Germania*, ch. 16.

1. *Germanorum populis.* Give the names of some, and
state their positions.

2. *Pati.* Why in infinitive? *Inscitia.* In what case?
Citra. What is the meaning? *Suffugium.* What is the
construction?

3. Give the names of Latin historians after Tacitus.

IV.

Translate :

Ipsi Britanni delectum ac tributa et injuncta im-
perii munera impigre obeunt, si injuriæ absint : has
ægre tolerant, jam domiti ut pareant, nondum ut ser-
viant. Igitur primus omnium Romanorum divus Ju-
lius cum exercitu Britanniam ingressus, quanquam pro-
spera pugna terruerit incolas ac litore potitus sit, potest
videri ostendisse posteris, non tradidisse. Mox bella
civilia, et in rem publicam versa principum arma, ac
longa oblivio Britanniæ etiam in pace. Consilium id
divus Augustus vocabat, Tiberius præceptum. Agitasse
Caium Cæsarem de intranda Britannia satis constat, ni
velox ingenio, mobilis pœnitentiæ, et ingentes adversus
Germaniam conatus frustra fuissent. Divus Claudius
auctor operis, transvectis legionibus auxiliisque et as-
sumpto in partem rerum Vespasiano ; quod initium
venturæ mox fortunæ fuit. Domitæ gentes, capti reges,
et monstratus fatis Vespasianus.

TACITUS, *Agricola*, ch. 13.

1. In what years did Julius Cæsar invade Britain? To
what part of it were his operations limited?

2. What relationship existed between Julius Cæsar and
Augustus, and what between Augustus and Tiberius? Who
was Caius Cæsar? How was he related to Tiberius, and
how to Claudius? What other Roman Emperors, besides
Claudius, were in Britain?

3. Give examples of the government of the genitive by
adjectives, verbs, and adverbs.

GREEK.
HONORS.

Examiners : } Rev. John McCaul, LL.D.
Thomas Moss, M.A.

I.

Translate :

τὸ πᾶν δ' ἀφ' Ἑλλάδος αἴας συνορμένοις
πένθεια τλησικάρδιος
δόμων ἑκάστου πρέπει,
πολλὰ γοῦν θιγγάνει πρὸς ἧπαρ·
οὓς μὲν γάρ τις ἔπεμψεν
οἶδεν· ἀντὶ δὲ φωτῶν
τεύχη καὶ σποδὸς εἰς ἑκάστου δόμους ἀφικνεῖται.
ὁ χρυσαμοιβὸς δ' Ἄρης σωμάτων
καὶ ταλαντοῦχος ἐν μάχῃ δορὸς
πυρωθὲν ἐξ Ἰλίου
φίλοισι πέμπει βαρὺ
ψῆγμα δυσδάκρυτον ἀν-
τήνορος σποδοῦ γεμί-
ζων λέβητας εὐθέτους.
στένουσι δ' εὖ λέγοντες ἄνδρα τὸν μὲν ὡς
μάχης ἴδρις· τὸν δ' ἐν φοναῖς καλῶς πεσόντ'
ἀλλοτρίας διαὶ γυναικός. τάδε σῖγά τις βαΰ-
ζει. φθονερὸν δ' ὑπ' ἄλγος ἔρπει προδίκοις Ἀτρείδαις.
οἱ δ' αὐτοῦ περὶ τεῖχος
θήκας Ἰλιάδος γᾶς
εὔμορφοι κατέχουσιν· ἐχθρὰ δ' ἔχοντας ἔκρυψεν.
βαρεῖα δ' ἀστῶν φάτις ξὺν κότῳ
δημοκράντου δ' ἀρᾶς τίνει χρέος.

            Æschylus, *Agamemnon*, vv. 429-457.

1. τὸ πᾶν. What is the construction? Give the Latin equivalent. In what other sense does Æschylus use the phrase?

2. θιγγάνω. Of what Latin word the probable root?

3. τεύχη. Give different translations.

4. βαρύ. (Line 441.) What other reading?

5. λέβητας εὐθέτους. Mention another reading. Which do you prefer, and why?

6. When do the tragedians use a masculine adjective or participle with a feminine noun?

7. Scan and give the metrical names of the first seven and the last three lines.

II.

Translate :

ἀλλ' ἐμὸν ἐκ τοῦδ' ἔρνος ἀερθὲν,
τὴν πολυκλαύτηντ' Ἰφιγένειαν,
ἄξια δράσας ἄξια πάσχων
μηδὲν ἐν Ἅιδου μεγαλαυχείτω,
ξιφοδηλήτῳ
θανάτῳ τίσας ἅπερ ἦρξεν.

ÆSCHYLUS, *Agamemnon*, vv. 1525-1530.

1. τε. What is the force? What distinction between the use of τε and καί as copulatives by the poets?

2. ἦρξεν. Discuss the etymology of this word.

III.

Translate :

ἄλλα τ' εὖ δρᾶν φησιν, ὑμᾶς δ' οὐκ ἄγειν τὰς ἡμέρας·
οὐδὲν ὀρθῶς, ἀλλ' ἄνω τε καὶ κάτω κυδοιδοπᾶν·
ὥστ' ἀπειλεῖν φησιν αὐτῇ τοὺς θεοὺς ἑκάστοτε
ἡνίκ' ἂν ψευσθῶσι δείπνου, κἀπίωσιν οἴκαδε,
τῆς ἑορτῆς μὴ τυχόντες κατὰ λόγον τῶν ἡμερῶν.
κᾆθ' ὅταν θύειν δέῃ, στρεβλοῦτε καὶ δικάζετε·
πολλάκις δ' ἡμῶν ἀγόντων τῶν θεῶν ἀπαστίαν,
ἡνίκ' ἂν πενθῶμεν ἢ τὸν Μέμνον' ἢ Σαρπηδόνα,
σπένδεθ' ὑμεῖς καὶ γελᾶτ'· ἀνθ' ὧν λαχὼν Ὑπέρβολος
τῆτες ἱερομνημονεῖν, κἄπειθ' ὑφ' ἡμῶν τῶν θεῶν
τὸν στέφανον ἀφῃρέθη· μᾶλλον γὰρ οὕτως εἴσεται
κατὰ σελήνην ὡς ἄγειν χρὴ τοῦ βίου τὰς ἡμέρας.

• ARISTOPHANES, *Nubes*, vv. 614-626

1. Explain the following terms in the Athenian calendar: μῆνες πληρεῖς, μῆνες κοῖλοι, μὴν ἐμβολιμαῖος, δευτέρα ἰσταμένου, ἐννεακαιδεκαετηρίς, ἔνη καὶ νέα.

2. Give the rule for reducing a date given in Olympiads to the year B. C.

3. ἱερομνήμονες. State what you know of their functions and duties.

4. τῆς ἑορτῆς τυχόντες. On what principle is the genitive here used?

5. Translate and write notes upon—

ΣΤΡ. καὶ μὴν ὅθεν γε πρῶτον ἠρξάμεσθα λοιδορεῖσθαι
ἐγὼ φράσω· 'πειδὴ γὰρ εἱστιώμεθ', ὥσπερ ἴστε,
πρῶτον μὲν αὐτὸν τὴν λύραν λαβόντ' ἐγὼ 'κέλευσα
ᾆσαι Σιμωνίδου μέλος, τὸν Κριόν, ὡς ἐπέχθη.
ὁ δ' εὐθέως ἀρχαῖον εἶν' ἔφασκε τὸ κιθαρίζειν
ᾄδειν τε πίνονθ', ὡσπερεὶ κάχρυς γυναῖκ' ἀλοῦσαν.

ARISTOPHANES. 1353-1358.

IV.

1. What were the modes of effecting a change of scenery on the Greek stage?

2. What are *monodies* in Greek plays?

3. Give a scale of the Anapæstic Tetrameter Catalectic.

4. What proofs are there that the language of Æschylus was affected by his residence in Sicily?

5. Explain the proverbial phrase: οὐδὲ τὰ τρία Στησιχόρου γιγνώσκεις.

6. Who is conjectured to have been represented by λόγος ἄδικος? On what ground?

7. When must the fifth foot of the Tragic Trimeter Acat. be an Iambus?

8. What verses are called *Epichoriambic?* What *Prosodiac?*

9. Where is ἄν placed in the apodosis of a sentence?

10. What prepositions are used after comparatives to express (1) a preference in general; (2) a choice; (3) excess?

11. Discuss the question: Was the middle comedy a distinct species?

V.

Translate :

Περὶ δὲ προβλημάτων καὶ λύσεων, ἐκ πόσων τε καὶ ποίων ἂν εἰδῶν εἴη, ὧδε θεωροῦσι γένοιτ' ἂν φανερόν. Ἐπεὶ γάρ ἐστι μιμητὴς ὁ ποιητής, ὥσπερ ἂν ἢ ζωγράφος ἤ τις ἄλλος εἰκονοποιός. ἀνάγκη μιμεῖσθαι, τριῶν ὄντων τὸν ἀριθμὸν, ἕν τι ἀεί. Ἢ γὰρ οἷα ἦν, ἢ ἔστιν· ἢ οἷά φασι καὶ δοκεῖ· ἢ οἷα εἶναι δεῖ· Ταῦτα δ' ἐξαγγέλλεται λέξει, ἢ καὶ γλώτταις καὶ μεταφοραῖς. Καὶ πολλὰ πάθη τῆς λέξεώς ἐστι. Δίδομεν γὰρ ταῦτα τοῖς ποιηταῖς. Πρὸς δὲ τούτοις οὐχ ἡ αὐτὴ ὀρθότης ἐστὶ τῆς πολιτικῆς καὶ τῆς ποιητικῆς. Αὐτῆς δὲ τῆς ποιητικῆς διττὴ ἡ ἁμαρτία. ἡ μὲν γὰρ καθ' αὑτὴν, ἡ δὲ κατὰ συμβεβηκός· Εἰ μὲν γὰρ προείλετο μιμήσασθαι κατ' ἀδυναμίαν, αὐτῆς ἡ ἁμαρτία. εἰ δὲ τὸ προελέσθαι μὴ ὀρθῶς, ἀλλὰ τὸν ἵππον ἄμφω τὰ δεξιά προβεβληκότα, ἢ τὸ καθ' ἑκάστην τέχνην ἁμάρτημα, οἷον τὸ κατὰ ἰατρικὴν ἢ ἄλλην τέχνην, ἢ ἀδύνατα πεποίη ται ὁποιαοῦν, οὐ καθ' ἑαυτήν. Ὥστε δεῖ τὰ ἐπιτιμήματα ἐν τοῖς προβλήμασιν ἐκ τούτων ἐπισκοποῦντα λύειν. Πρῶτον μὲν γὰρ, ἂν τὰ πρὸς αὑτὴν τὴν τέχνην ἀδύνατα πεποίηται, ἡμάρτηται. Ἀλλ' ὀρθῶς ἔχοι, εἰ τυγχάνοι τοῦ τέλους τοῦ αὑτῆς. Τὸ γὰρ τέλος εἴρηται· εἰ οὕτως ἐκπληκτικώτερον ἢ αὐτὸ ἢ ἄλλο ποιοῖ μέρος. Παράδειγμα ἡ τοῦ Ἕκτορος δίωξις. Εἰ μέντοι τὸ τέλος ἢ μᾶλλον ἢ ἧττον ἐνεδέχετο ὑπάρχειν, καὶ κατὰ τὴν περὶ τούτων τέχνην ἡμάρτηται, οὐκ ὀρθῶς.

ARISTOTLE, *Poetics*, ch. 25.

1. Τῆς ὑποκριτικῆς. What other reading ?

2. ὁποιαοῦν. What is the Latin equivalent ?

3. What is Aristotle's idea of the proper function of the *chorus* ? Quote the opinion of Horace upon this subject.

4. Explain the terms : κόμμος—στάσιμον—περιπέτεια—ἀναγνώρισις—χορηγία—ὄψις.

5. What objection to Aristotle's derivation of κωμῳδία ?

GREEK.
HONORS.

Examiners: { REV. JOHN McCAUL, LL.D.
              THOMAS MOSS, M.A.

I.

Translate.

ἰδοῖσα δ' ὀξεῖ' Ἐρινὺς   Στρ· γ'.
ἔπεφνέ οἱ σὺν ἀλλαλοφονίᾳ γένος ἀρήϊον·
λείφθη δὲ Θέρσανδρος ἐριπέντι Πολυνείκει, νέοις ἐν ἀέθλοις
ἐν μάχαις τε πολέμου
τιμώμενος, Ἀδραστιδᾶν θάλος ἀρωγὸν δόμοις.
ὅθεν σπέρματος ἔχοντι ῥίζαν. πρέπει τὸν Αἰνησιδάμου
ἐγκωμίων τε μελέων λυρᾶν τε τυγχανέμεν.
Ὀλυμπίᾳ μὲν γὰρ αὐτὸς   Ἀντ. γ'·
γέρας ἔδεκτο, Πυθῶνι δ' ὁμόκλαρον ἐς ἀδελφεὸν
Ἰσθμοῖ τε κοιναὶ Χάριτες ἄνθεα τεθρίππων δυωδεκαδρόμων
ἄγαγον. τὸ δὲ τυχεῖν
πειρώμενον ἀγωνίας παραλύει δυσφρονᾶν.
ὁ μὰν πλοῦτος ἀρεταῖς δεδαιδαλμένος φέρει τῶν τε καὶ τῶν
καιρόν, βαθεῖαν ὑπέχων μέριμναν ἀγροτέραν,
ἀστὴρ ἀρίζηλος, ἐτυμώτατον   Ἐπ. γ'.
ἀνδρὶ φέγγος· εὖ δέ μιν ἔχων τις οἶδεν τὸ μέλλον,
ὅτι θανόντων μὲν ἐνθάδ' αὐτίς ἀπάλαμνοι φρένες
ποινὰς ἔτισαν, τὰ δ' ἐν τᾷδε Διὸς ἀρχᾷ
ἀλιτρὰ κατὰ γᾶς δικάζει τις ἐχθρᾷ
λόγον φράσαις ἀνάγκᾳ.
ἴσον δὲ νύκτεσσιν αἰεί,   Στρ. δ'.
ἴσα δ' ἐν ἀμέραις ἀέλιον ἔχοντες ἀπονέστερον
ἐσλοὶ δεκόνται βίοτον, οὐ χθόνα ταράσσοντες ἐν χερὸς ἀκμᾷ
οὐδὲ πόντιον ὕδωρ
κεινὰν παρὰ δίαιταν· ἀλλὰ παρὰ μὲν τιμίοις

θεῶν, οἵτινες ἔχαιρον εὐορκίαις, ἄδακρυν νέμονται
αἰῶνα· τοὶ δ' ἀπροσόρατον ὀκχέοντι πόνον.
ὅσοι δ' ἐτόλμασαν ἐστρὶς   Αντ. δ'.
ἑκατέρωθι μείναντες ἀπὸ πάμπαν ἀδίκων ἔχειν
ψυχάν, ἔτειλαν Διὸς ὁδὸν παρὰ Κρόνου τύρσιν· ἔνθα μακάρων
νάσος ὠκεανίδες
αὖραι περιπνέοισιν, ἄνθεμα δὲ χρυσοῦ φλέγει,
τὰ μὲν χερσόθεν ἀπ' ἀγλαῶν δενδρέων, ὕδωρ δ' ἄλλα φέρβει,
ὅρμοισι τῶν χέρας ἀναπλέκοντι καὶ κεφαλὰς
βουλαῖς ἐν ὀρθαῖσι 'Ραδαμάνθυος,   'Επ. δ'.
ὃν πατὴρ ἔχει Κρόνος ἕτοιμον αὐτῷ πάρεδρον,
πόσις ὁ πάντων 'Ρέας ὑπέρτατον ἐχοίσας θρόνον.

<div align="right">PINDAR, Olymp. II., vv. 41-77.</div>

1. ἐριπέντι. Parse. What other reading? Give the perfect passive.

2. ἐν μάχαις. Explain the allusion.

3. ὅθεν. Quote a passage in which *unde* is similarly used.

4. ἔχοντι. What part of the verb? What other reading?

5. κοιναὶ Χάριτες. Give different interpretations.

6. ἀρίζηλος. What is Buttman's theory as to the root of this word?

7. εὖ δέ μιν ἔχων. Mention another reading. With what word in the sentence would you couple εὖ, and why?

8. ἐστρὶς ἑκατέρωθ. From what source is Pindar supposed to have borrowed this idea?

<div align="center">II.</div>

1. Quote Horace's criticism on Pindar's style.

2. What is the *Schema Pindaricum?* To what case is its use in Attic Greek restricted?

3. Explain Pindar's use of different dialectical forms of the same word.

4. Classify the odes according to the musical mode for which they are best adapted.

5. How does Pindar's treatment of the ancient myths differ from that of the tragedians?

6. Who introduced the present division of the odes?

III.

Translate:

Οὐ μὴν ἀλλ' ἐπεὶ τὴν κρατίστην μοῖραν ἐπέχει τῶν ἄλλων τὸ πρῶτον, λέγω δὲ τὸ μεγαλοφυές, χρὴ κἀνταῦθα, καὶ εἰ δωρητὸν τὸ πρᾶγμα μᾶλλον ἢ κτητόν, ὅμως καθ' ὅσον οἷόν τε, τὰς ψυχὰς ἀνατρέφειν πρὸς τὰ μεγέθη, καὶ ὥσπερ ἐγκύμονας ἀεὶ ποιεῖν γενναίου παραστήματος. τινα, φήσεις, τρόπον; γέγραφά που καὶ ἑτέρωθι τὸ τοιοῦτον ὕψος μεγαλοφροσύνης ἀπήχημα. ὅθεν καὶ φωνῆς δίχα θαυμάζεταί ποτε ψιλὴ καθ' ἑαυτὴν ἡ ἔννοια δι' αὐτὸ τὸ μεγαλόφρον, ὡς ἡ τοῦ Αἴαντος ἐν Νεκυίᾳ σιωπὴ μέγα καὶ παντὸς ὑψηλότερον λόγου. πρῶτον οὖν τὸ ἐξ οὗ γίνεται, προϋποτίθεσθαι πάντως ἀναγκαῖον, ὡς ἔχειν δεῖ τὸν ἀληθῆ ῥήτορα μὴ ταπεινὸν φρόνημα καὶ ἀγεννές. οὐδὲ γὰρ οἷόν τε, μικρὰ καὶ δουλοπρεπῆ φρονοῦντας καὶ ἐπιτηδεύοντας παρ' ὅλον τὸν βίον θαυμαστόν τι καὶ τοῦ παντὸς αἰῶνος ἐξενεγκεῖν ἄξιον· μεγάλοι δὲ οἱ λόγοι τούτων, κατὰ τὸ εἰκὸς, ὧν ἂν ἐμβριθεῖς ὦσιν αἱ ἔννοιαι. ταύτῃ καὶ εἰς τοὺς μάλιστα φρονηματίας ἐμπίπτει τὰ ὑπερφυᾶ· ὁ γὰρ τῷ Παρμενίωνι φήσαντι, ,,ἐγὼ μὲν ἠρκέσθην .... [εἰ Ἀλέξανδρος ἤμην," Κἀγὼ νὴ Δία," εἰπὼν, " εἰ Παρμενίων ἤμην," τὸ αὐτοῦ μεγαλόφρον δείκνυσιν· ὡς καὶ τὸ Ὁμήρου παρορίζει μεγαλοφυὲς ἔν τῷ Οὐρανῷ ἐστήριξε κάρη καὶ ἐπὶ χθονὶ βαίνει.]

........τὸ ἐπ' οὐρανὸν ἀπὸ γῆς διάστημα· καὶ τοῦτ' ἂν εἴποι τις οὐ μᾶλλον τῆς Ἔριδος ἢ Ὁμήρου μέτρον. ᾧ ἀνόμοιόν γε τὸ Ἡσιόδειον ἐπὶ τῆς Ἀχλύος, εἴγε Ἡσιόδου καὶ τὴν Ἀσπίδα θετέον·

τῆς ἐκ μὲν ῥινῶν μύξαι ῥέον·

οὐ γὰρ δεινὸν ἐποίησε τὸ εἴδωλον, ἀλλὰ μισητόν.

LONGINUS, S. IX.

1. Ἡ τοῦ Αἴαντος σιωπή. Quote other instances of sublimity of the same kind.

2. Γέγραφά που, &c. Mention different explanations of the syntax of this passage. Which do you prefer?

3. οὐδὲ γὰρ οἷόν τέ μικρά. Cite parallel passages.

4. τοῖς τοιούτοις ἐλαττώμασιν ἐπιχειρῶν ὅμως αὐτόθεν ὁ Καικίλιος ἐν τοῖς ὑπὲρ Λυσίου συγγράμμασιν ἀπεθάρρησε τῷ παντὶ Λυσίαν ἀμείνω Πλάτωνος ἀποφήνασθαι· δυσί πάθεσι χρησάμενος ἀκρίτοις· φιλῶν γὰρ τὸν Λυσίαν ὡς οὐδ' αὐτὸς αὑτὸν ὅμως μᾶλλον μισεῖ τῷ παντί Πλάτωνα ἢ Λυσίαν φιλεῖ.

Translate and give another reading of this passage.

IV.

1. What objection is there to the form of the name Donysius Longinus?

2. When should an orator, according to Longinus, imitate Demosthenes, and when Cicero?

3. Explain the terms: "epanaphora," "litotes," "metonymia," "polyptoton."

V.

Translate :

ΥΛ. 　　　　　　　　　ψαύω μὲν ἔγωγε,
λαθίπονον δ' ὀδυνᾶν οὔτ' ἔνδοθεν οὔτε θύραθεν
ἔστι μοι ἐξανύσαι βίοτον· τοιαῦτα νέμει Ζεύς.

ΗΡ. ὦ παῖ ποῦ τοτ' εἶ; 　　　　　　στρ. γ΄.
τᾷδέ με τᾷδέ με πρόσλαβε κουφίσας.
ἒ ἔ, ἰὼ ἰὼ δαῖμον.
θρώσκει δ' αὖ, θρώσκει δειλαία 　　　ἀντ. β΄.
διολοῦσ' ἡμᾶς
ἀποτίβατος ἀγρία νόσος.
ὦ Παλλὰς Παλλάς, τόδε μ' αὖ λωβᾶται· ἰὼ παῖ
τὸν φύτορ' οἰκτείρας ἀνεπίφθονον εἴρυσον ἔγχος,
παῖσον ἐμᾶς ὑπὸ κλῇδος· ἀκοῦ δ' ἄχος, ᾧ μ' ἐχόλωσεν
σὰ μάτηρ ἄθεος, τὰν ὧδ' ἐπίδοιμι πεσοῦσαν
αὔτως, ὧδ' αὔτως, ὡς μ' ὤλεσεν. ὦ γλυκὺς "Αιδας,
ὦ Διὸς αὐθαίμων, 　　　　　　　ἀντ. γ΄.
εὔνασον εὔνασον ὠκυπέτᾳ μόρῳ
τὸν μέλεον φθίσας.

ΧΟ. κλύουσ' ἔφριξα τάσδε συμφοράς, φίλαι,
ἄνακτος, οἵας οἷος ὢν ἐλαύνεται.

ΗΡ. ὦ πολλὰ δὴ καὶ θερμὰ κοὺ λόγῳ κακὰ
καὶ χερσὶ καὶ νώτοισι μοχθήσας ἐγώ·
κοὔπω τοιοῦτον οὔτ' ἄκοιτις ἡ Διὸς
προὔθηκεν οὔθ' ὁ στυγνὸς Εὐρυσθεὺς ἐμοί,
οἷον τόδ' ἡ δολῶπις Οἰνέως κόρη
καθῆψεν ὤμοῖς Ἐρινύων
ὑφαντὸν ἀμφίβληστρον, ᾧ διόλλυμαι.

　　　　　　SOPHOCLES, *Trachiniæ*, vv. 1021-1052.

GREEK.
HONORS.

Examiners: } Rev. John McCaul, LL.D.
} Thomas Moss, M.A.

I.

Translate :

Τοιγάρτοι τί των ἀνελπίστων καὶ ἀπροσδοκήτων ἐφ'
ἡμῶν οὐ γέγονεν; οὐ γὰρ βίον γε ἡμεῖς ἀνθρώπινον
βεβιώκαμεν, ἀλλ' εἰς παραδοξολογίαν τοῖς ἐσομένοις μεθ'
ἡμᾶς ἔφυμεν· Οὐχ ὁ μὲν τῶν Περσῶν βασιλεύς, ὁ τὸν
Ἄθω διορύξας, ὁ τὸν Ἑλλήσποντον ζεύξας, ὁ γῆν καὶ
ὕδωρ τοὺς Ἕλληνας αἰτῶν, ὁ τολμῶν ἐν ταῖς ἐπιστολαῖς
γράφειν, ὅτι δεσπότης ἐστὶν ἁπάντων ἀνθρώπων ἀφ'
ἡλίου ἀνιόντος μέχρι δυομένου, νῦν οὐ περὶ τοῦ κύριος
ἑτέρων εἶναι διαγωνίζεται, ἀλλ' ἤδη περὶ τῆς τοῦ σώματος
σωτηρίας; καὶ τοὺς αὐτοὺς ὁρῶμεν τῆς τε δόξης ταύτης,
καὶ τῆς ἐπὶ τὸν Πέρσην ἡγεμονίας ἠξιωμένους, οἳ καὶ τὸ
ἐν Δελφοῖς ἱερὸν ἠλευθέρωσαν; Θῆβαι δὲ Θῆβαι, πολις
ἀστυγείτων, μεθ' ἡμέραν μίαν ἐκ μέσης τῆς Ἑλλάδος
ἀνήρπασται, εἰ καὶ δικαίως, περὶ τῶν ὅλων οὐδὲν ὀρθῶς
βουλευσάμενοι, ἀλλὰ τήν γε θεοβλάβειαν καὶ τὴν ἀφρο-
σύνην οὐκ ἀνθρωπίνως ἀλλὰ διαμονίως κτησάμενοι;
Λακεδαιμόνιοι δὲ οἱ ταλαίπωροι, προσαψάμενοι μόνον
τούτων τῶν πραγμάτων ἐξ ἀρχῆς περὶ τὴν τοῦ ἱεροῦ κατα-
ληψιν, οἱ τῶν Ἑλλήνων ποτὲ ἀξιοῦντες ἡγεμόνες εἶναι,
νῦν ὁμηρεύσοντες καὶ τῆς συμφορᾶς ἐπίδειξιν ποιησόμενοι
μέλλουσιν ὡς Ἀλέξανδρον ἀναπέμπεσθαι, τοῦτο πεισύ-
μενοι καὶ αὐτοὶ καὶ ἡ πατρὶς, ὅ τι ἂν ἐκείνῳ δόξῃ, καὶ ἐν
τῇ τοῦ κρατοῦντος καὶ προηδικημένου μετριότητι κριθησό-
μενοι.

ÆSCHINES, *Contra Ctes.*

1. ὁ τῶν Περσῶν βασιλεύς, Who?

2. Δελφοῖς, Mention any other celebrated oracles of antiquity.

3. ἐκ μέσης. Distinguish the meanings of of πᾶς and μέσος, according to the position of the article. What is the meaning of μέσος πολίτης?

4. δαιμονίως. What position did the δαίμονες occupy in the Greek mythology.

5. πεισόμενοι. Parse.

6. περὶ τὴν τοῦ ἱεροῦ κατάληψιν. Explain the allusion.

7. κριθησόμενοι. Mention and discuss another reading.

II.

Translate:

Βούλομαι τοίνυν ἐπανελθεῖν ἐφ' ἃ τούτων ἑξῆς ἐπο-
λιτευόμην. καὶ σκοπεῖτε ἐν τούτοις πάλιν αὖ, τί τὸ τῇ
πόλει βέλτιστον ἦν. Ὁρῶν γὰρ ὦ ἄνδρες Ἀθηναῖοι,
τὸ ναυτικὸν ὑμῶν καταλυόμενον, καὶ τοὺς μὲν πλουσίους
ἀτελεῖς ἀπὸ μικρῶν ἀναλωμάτων γιγνομένους, τοὺς δὲ
μέτρια ἢ μικρὰ κεκτημένους τῶν πολιτῶν τὰ ὄντα ἀπολ-
λύντας, ἔτι δ' ὑστερίζουσαν ἐκ τούτων τὴν πόλιν τῶν
καιρῶν, ἔθηκα νόμον καθ' ὃν τοὺς μὲν τὰ δίκαια ποιεῖν
ἠνάγκασα, τοὺς πλουσίους, τοὺς δὲ πένητας ἔπαυσ'
ἀδικουμένους, τῇ πόλει δ' ὅπερ ἦν χρησιμώτατον, ἐν καιρῷ
γίγνεσθαι τὰς παρασκευὰς ἐποίησα. Καὶ γραφεὶς τὸν
ἀγῶνα τοῦτον εἰς ὑμᾶς εἰσῆλθον καὶ ἀπέφυγον, καὶ τὸ
μέρος τῶν ψήφων ὁ διώκων οὐκ ἔλαβεν. Καίτοι πόσα
χρήματα τοὺς ἡγεμόνας τῶν συμμοριῶν ἢ τοὺς δευτέρους
καὶ τρίτους οἴεσθέ μοι διδόναι, ὥστε μάλιστα μὲν μὴ
θεῖναι τὸν νόμον τοῦτον, εἰ δὲ μή, καταβαλόντα ἐᾶν ἐν
ὑπωμοσίᾳ; τοσαῦτ', ὦ ἄνδρες Ἀθηναῖοι, ὅσα ὀκνήσαιμ'
ἂν πρὸς ὑμᾶς εἰπεῖν. Καὶ ταῦτ' εἰκότως ἔπραττον ἐκεῖνοι.

DEMOSTHENES, p. 30.

1. Write notes upon: ἀτελεῖς—τῶν καιρῶν—γραφείς—
τὸ μέρος—ψήφων — συμμοριῶν — μάλιστα μέν—καταβάλ
λοντα—ὑπωμοσίᾳ.

2. Explain the phrases: ἀνδριάντα ἐκδιδόναι κατὰ συγγρα-
φήν—περιεῖναι χρήματά τῳ—ψήφους τίθεναι—εὐθύνας ἐπιση-
μαίνεσθαι—ἀρξάμενος ἀπό τινος.

Translate :

Καίτοι ταύτης τῆς μελέτης καὶ τῆς ἐπιμελείας, Αἰσ-
χίνη, εἴπερ ἐκ ψυχῆς δικαίας ἐγίγνετο καὶ τὰ τῆς πατρίδος
συμφέροντα προῃρημένης, τοὺς καρποὺς ἔδει γενναίους
καὶ καλοὺς καὶ πᾶσιν ὠφελίμους εἶναι, συμμαχίας πόλεων,
πόρους χρημάτων, ἐμπορίου κατασκευὴν, νόμων συμφε-
ρόντων θέσεις, τοῖς ἀποδειχθεῖσιν ἐχθροῖς ἐναντιώματα.
Τούτων γὰρ ἁπάντων ἦν ἐν τοῖς ἄνω χρόνοις ἐξέτασις,
καὶ ἔδωκεν ὁ παρελθὼν χρόνος πολλὰς ἀποδείξεις ἀνδρὶ
καλῷ τε κἀγαθῷ, ἐν οἷς οὐδαμοῦ σὺ φανήσει γεγονὼς, οὐ
πρῶτος, οὐ δεύτερος, οὐ τρίτος, οὐ τέταρτος, οὐ πέμπτος,
οὐχ ἕκτος, οὐχ ὁποστοσοῦν, οὔκουν ἐπί γ᾽ οἷς ἡ πατρὶς
ηὐξάνετο. Τίς γὰρ συμμαχία σοῦ πράξαντος γέγονε τῇ
πόλει ; τίς δὲ βοήθεια ἢ κτῆσις εὐνοίας ἢ δόξης ; τίς δὲ
πρεσβεία ; τίς διακονία δι᾽ ἣν ἡ πόλις ἐντιμοτέρα ; τί
τῶν οἰκείων ἢ τῶν Ἑλληνικῶν καὶ ξενικῶν, οἷς ἐπέστης,
ἐπηνώρθωται ; ποῖαι τριήρεις ; ποῖα βέλη ; ποῖοι νεώσ-
οικοι ; τίς ἐπισκευὴ τειχῶν ; ποῖον ἱππικόν, τί τῶν
ἁπάντων σὺ χρήσιμος εἶ ; τὶς ἢ τοῖς εὐπόροις ἢ τοῖς ἀπό-
ροις πολιτικὴ καὶ κοινὴ βοήθεια χρημάτων ; οὐδεμία.
Ἀλλ᾽, ὦ τᾶν, εἰ μηδὲν τούτων, εὔνοιά γε καὶ προθυμία ;

DEMOSTHENES, *De. Cor.*

1. ἐξέτασις. Whence derived ? Explain the force.

2. οὐ πρῶτος, &c. Of what is this thought to be an imita-
tion ?

3. What is the general rule for the use of the negatives
οὐ and μὴ in objective sentences ?

4. When can ὡς be used for εἰς ?

5. ὦ τᾶν. Discuss the etymology.

IV.

1. On what grounds was the accusation of Ctesiphon based?

2. Describe and distinguish εἰσαγγελία and προβολή.

3. Explain the meaning of *Seisactheia.*

4. What was the Syracusan term for *Ostracism ?* What
securities were there against the abuse of this system ?

5. Describe the duties and powers of the νομόθεται.

6. What is the broad distinction in meaning between the present and aorist? Illustrate by paraphrasing γράφε and γράψὸν.

7. What is the only word in which the temporal augment is omitted in Attic prose?

8. Give brief sketches of the political career and oratorical characteristics of Æschines, Demades, Lycurgus and Hyperides.

V.

Write in ordinary Greek, and translate:

ΑΓΑΘΗΙΤΥΧΗΙ
ΤΟΝΛΑΜΠΡΟΤΑΤΟΝΑΝΘΥΠΑΤΟΝ
ΤΗΣΕΛΛΑΔΟΣΡΟΥΦΙΟΝΦΗΣΤΟΝ
ΚΑΙΑΡΕΟΠΑΓΕΙΤΗΝΗΕΞΑΡΙΟΥ
ΠΑΓΟΥΒΟΥΛΗΚΛΙΗΒΟΥΛΗΤΩΝ
ΤΡΙΑΚΟΣΙΩΝΚΛΙΟΔΗΜΟΣΟΛΘΗ
ΝΑΙΩΝΕΥΝΟΙΑΣΕΝΕΚΑΚΛΙΕΤΕΡ
ΓΕΣΙΑΣΤΗΣΠΕΡΙΤΗΝΠΟΛΙΝΑΝΕ
ΣΤΗΣΕΝΠΡΟΝΟΙΑΦΛΑΒΙΟΥΠΟΜ
ΔΑΔΟΥΧΟΥΤΟΥΔΙΑΣΗΜΟΤΑΤΟΥΚΑΙ
ΑΠΟΚΟΜΙΤΩΝ.

ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

LATIN.

HONORS.

Examiners: { REV. JOHN MCCAUL, LL.D.
{ THOMAS MOSS, M.A.

I.

His superioribusque illis equi adempti, qui publicum equum habebant, tribuque moti ærarii omnes facti. Neque senatu modo aut equestri ordine regendo cura se censorum tenuit, nomina omnium ex juniorum tabulis excerpserunt qui quadriennio non militassent, quibus neque vacatio justa militiæ neque morbus causa fuisset: et ea supra duo millia nominum in ærarios relata tribuque omnes moti: additumque tam tristi censoriæ notæ triste senatus consultum, ut ii omnes, quos censores notassent, pedibus mercrent mitterenturque in Siciliam ad Cannensis exercitus reliquias, cui militum generi non prius quam pulsus Italia hostis esset finitum stipendiorum tempus erat. Quum censores ob inopiam ærarii se jam locationibus abstinerent ædium sacrarum tuendarum curuliumque equorum præbendorum ac similium his rerum, convenere ad eos frequentes qui hastæ hujus generis adsueverant, hortarique censores ut omnia perinde agerent locarent ac si pecunia in ærario esst: neminem nisi bello confecto pecuniam ab ærario petiturum esse. Convenere deinde domini eorum, quos Tib. Sempronius ad Beneventum manu emiserat, arcessitosque se ab triumviris mensariis esse dixerunt ut pretia servorum acciperent: cæterum non ante quam bello con-

fecto accepturos esse. Quum hæc inclinatio animorum plebis ad sustinendam inopiam ærarii fieret, pecuniæ quoque pupillares primo deinde viduarum cœptæ conferri, nusquam eas tutius sanctiusque deponere credentibus qui deferebant quam in publica fide. Inde si quid emptum paratumque pupillis ac viduis foret, a quæstore perscribebatur.

<div align="right">Livy, xxiv., 18.</div>

Write explanatory notes on *publicum equum, tribu moti, ærarii, juniorum tabulis, vacatio, pedibus mererent, hastæ adsueverant, triumviris mensariis, pecuniæ pupillares, a quæstore perscribebatur.*

<div align="center">II.</div>

Translate to *potentiores*:

Præposuerat prætorianis Publium Sabinum, a præfectura cohortis, Julium Priscum tum centurionem: Priscus Valentis, Sabinus Cæcinæ gratia pollebant. Inter discordes Vitellio nihil auctoritatis. Munia imperii Cæcina ac Valens obibant, olim anxii odiis, quæ bello et castris male dissimulata pravitas amicorum et fecunda gignendis inimicitiis civitas auxerat, dum ambitu, comitatu, et immensis salutantium agminibus contendunt comparanturque, variis in hunc aut illum Vitellii inclinationibus. Nec unquam satis fida potentia, ubi nimia est. Simul ipsum Vitellium, subitis offensis aut intempestivis blanditiis mutabilem, contemnebant metuebantque. Nec eo segnius invaserant domos, hortos, opesque imperii, cum flebilis et egens nobilium turba, quos ipsos liberosque patriæ Galba reddiderat, nulla principis misericordia juvarentur. Gratum primoribus civitatis etiam plebs approbavit, quod reversis ab exilio jura libertorum concessisset, quanquam id omni modo servilia ingenia corrumpebant, abditis pecuniis per occultos aut ambitiosos sinus, et quidam in domum Cæsaris transgressi, atque ipsis dominis potentiores.

Sed miles, plenis castris redundante multitudine, in porticibus aut delubris et urbe tota vagus, non principia noscere, non servare vigilias, neque labore firmari: per illecebras urbis et inhonesta dictu, corpus otio, animum libidinibus imminuebant. Postremo, ne salutis quidem cura, infamibus Vaticani locis magna pars tetendit; unde crebræ in vulgus mortes. Et adjacente Tiberi, Germanorum Gallorumque obnoxia

morbis corpora fluminis aviditas et æstus impatientia
labefecit. Insuper confusus pravitate vel ambitu ordo
militiæ. Sedecim prætoriæ, quatuor urbanæ cohortes
scribebantur, quis singula millia inessent.

<div align="right">Tacitus, Hist. ii., 92-93.</div>

1. *Præfectura cohortis.* Explain.

2. *Jura libertorum.* What? Explain the remainder
of the sentence.

3. *Principia.* What? *Tetendit.* What is the meaning ?

4. Give an account of the *cohortes prætoriæ, cohortes
urbanæ,* and *cohortes vigilum.*

5. *Fluminis aviditas.* Explain.

<div align="center">III.</div>

Translate :

Tertio die inducta cognitio est, multis sermonibus et
vario rumore iactata, de Iulii Tironis codicillis, quos
ex parte veros esse constabat, ex parte falsi dicebantur.
Substituebantur crimini Sempronius Senecio, eques
Romanus, et Eurythmus, Cæsaris libertus et procu-
rator. Heredes, quum Cæsar esset in Dacia, com-
muniter epistola scripta, petierant, ut susciperet
cognitionem. Susceperat. Reversus diem dixerat:
et, quum ex heredibus quidam, quasi reverentia Eu-
rythmi, remitterent accusationem, pulcherrime dixerat
Nec ille Polycletus est, nec ego Nero. Indulserat
tamen petentibus dilationem; cuius tempore exacto,
consederat auditurus. A parte heredum intraverunt
duo ; omnino postularunt, ut omnes heredes agere
cogerentur, quum detulissent omnes, aut sibi quoque
desistere permitteretur. Loquutus est Cæsar summa
gravitate, summa moderatione : quumque advocatus
Senecionis et Eurythmi dixisset, suspicionibus relinqui
reos, nisi audirentur, *Non curo,* inquit, *an isti
suspicionibus relinquantur: ego relinquor.* Dein, con-
versus ad nos : Ἐπίστασθε, *quid facere debeamus? Isti
enim queri volunt, quod sibi licuerit non accusare.*
Tum ex consilii sententia iussit denuntiari heredibus
omnibus, aut agerent, aut singuli approbarent caussas
non agendi, alioqui se vel de calumnia pronuntiaturum.
Vides, quam honesti, quam severi dies, quos iucun-
dissimae remissiones sequebantur. Adhibebamur quo-
tidie coenæ : erat modica, si principem cogites. In-
terdum ἀκροάματα audiebamus : interdum incundis-

simis sermonibus nox ducebatur.   Summo die abe-
untibus nobis (tam diligens in Cæsare humanitas fuit),
xenia sunt missa.

<div align="right">PLINY, <i>Epist.</i> vi., 31.</div>

1. Explain the meaning of the passages in italics.

2. What were ἀκροάματα?   What <i>xenia?</i>

3. Compare the styles of Livy, Tacitus, and Pliny; and
illustrate your statements by examples.

4. Draw up a short synopsis of the principal changes
made by the emperors, to the time of Hadrian, relative
to the senate, the consuls, the provinces, the taxes, and the
army.

<div align="center">IV.</div>

Expand:

<div align="center">

M·STATIO·M·F·CL·PRISCO
LICINIO·ITALICO·LEGATO·AVGVSTORVM
PR·PR·PROV·CAPPADOCIAE·LEG·AVGG.
PR·PR·PROV·BRITTANNIAE·LEG·AVGG
PR·PR·PROV·MOESIAE·SVPER·CVRATORI
ALVEI·TIBERIS·ET·CLOACARVM·VRBIS·COS
LEG·AVG·PROV·DACIAE·LEG·LEG·XIII·G.P.F.LEG·
LEG
X̅I̅I̅I̅I̅ GEM·MARTIAE·VICTRICIS·SACERDOTI·
TITIALI
FLAVIALI·PR·INTER·CIVES·ET·PEREGRINOS·TR·
PL·QVAEST
PROC·AVG·X̅X̅·HEREDITATIVM·PROV·NARBO-
NENS·ET·AQVITAN
PR·EQ·ALAE·I̅·PR·C·R·TR·MIL LEG·I̅·ADIVTR·P·F
ET·LEG·X̅·G·P·F
ET·LEG·I̅I̅I̅I̅·GALLICAE·PRAEF·COH·I̅I̅I̅I̅·LIN-
GONVM·VEXILLO·MIL
DONATO·A·DIVO·HADRIANO·IN·EXPEDITIONE
IVDAICA
Q·CASSIVS·DOMITIVS·PALVMBVS.

</div>

1. Distinguish AVG, AVGG, and AVGGG.

2. Explain SVPER.

3. What were the four great <i>collegia sacerdotum?</i>

4. Explain TITIALI and FLAVIALI.   Give other simi-
lar designations.

5. Write notes on X̅X̅·HEREDITATIVM and EXPEDI-
TIONE·IVDAICA.

University of Toronto.

ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

LATIN.

HONORS.

Examiners: { REV. JOHN McCAUL, LL.D.
THOMAS MOSS, M.A.

I.

Translate:

> Eu. Iam quidem hercle te ad prætorem rapiam et
>   tibi scribam dicam,
> nisi refers. Ly. Quid tibi ego referam? Eu. Quod
>   subripuisti meum.
> Ly. Subripui ego tuom? unde? aut quid id est?
>   Eu. Ita te amabit Iupiter,
> ut tu nescis. Ly. Nisi quidem tu mihi, quid quaeras,
>   dixeris.
> Eu. Aulam auri, inquam, te reposco, quam tu con-
>   fessus's mihi
> te abstulisse. Ly. Neque edepol ego dixi, neque
>   feci. Eu. Negas?
> Ly. Pernego imo: nam neque ego aurum, neque
>   istacc aula quae siet,
> scio nec novi. Eu. Illam, ex Silvani luco quam
>   abstuleras, cedo!
> I, refer! dimidiam tecum potius partem dividam.
> Tametsi fur mihi es: molestus non ero. Fur, I, refer.
> Ly. Sanus tu non es, qui furem me voces; ego te,
>   Euclio,

de alia re rescisse censui, quod ad med attinet.
Magna est [res], quam ego tecum otiose, si otium est,
    cupio loqui.
Eu.   Dic bona fide: tu id aurum non subripuisti?
    Ly.   Bona.
Eu.   Neque scis, quis id abstulerit? Ly. Istuc quo-
    que bona. Eu. Atque id si scies,
qui abstulerit, mihi indicabis? Ly. Faciam. Eu.
    Neque partem tibi
ab eo, quiqui est, inde posces, neque furem excipies?
    Ly.   Ita.
Eu.   Quid, si fallis? Ly. Tum me faciat, quod volt,
    magnus Iupiter!

                Plautus, *Aulularia*, iv., 10.

1. In what metre? Give a scale of it. Scan first ten verses. What other metres, besides Iambic and Trochaic, are found in Plautus? What was the Saturnian measure? What examples of it? On what grounds has its existence, as a species of metre, been denied?

2. Explain the use of *d* paragogic; give examples of peculiarities of elision, of the contraction of dissyllables, and trisyllables, of diæresis, and of quantity, exceptional with reference to rules and the usage of other authors.

3. Draw up an account of Roman comedies, with reference to the varieties of such compositions, the occasions on which they were represented, the actors, the music, the time, and the place, especially the peculiarities of the Roman theatre as compared with the Grecian, and give a list of authorities on the general subject.

II.

Translate:

    Posterius res inventast aurumque repertum,
    Quod facile et validis et pulchris dempsit honorem:
    Divitioris enim sectam plerumque secuntur
    Quamlubet et fortes et pulchro corpore creti.
    Quod siquis vera vitam ratione gubernet,
    Divitiae grandes homini sunt vivere parce
    Aequo animo: neque enim est umquam penuria parvi.
    At claros homines voluerunt se atque potentes,
    Ut fundamento stabili fortuna maneret
    Et placidam possent opulenti degere vitam,

Nequiquam, quoniam ad summum succedere honorem
Certantes iter infestum fecere viai,
Et tamen e summo, quasi fulmen, deicit ictos
Invidia interdum contemptim in Tartara taetra;
Ut satius multo iam sit parere quietum
Quam regere imperio res velle et regna tenere.
Proinde sine in cassum defessi sanguine sudent,
Angustum per iter luctantes ambitionis;
Quandoquidem sapiunt alieno ex ore petuntque
Res ex auditis potius quam sensibus ipsis,
Nec magis id nunc est neque erit mox quam fuit ante,
Invidia quoniam, ceu fulmine, summa vaporant
Plerumque et quae sunt aliis magis edita cumque.

LUCRETIUS, v. 1111-1133.

1. To what cause do you ascribe the uncommon variety of readings in Lucretius? What are the theories of Eichstaedt and Forbiger? What doubts as to the orthography that should be adopted in his poem? How is this question affected by the consideration of the age in which he lived? Give examples of archaisms that have been admitted in the best editions.

2. State briefly what you know of the most ancient extant specimens of the Latin language, and give examples of their peculiarities in declension, inflexion, and use of consonants and vowels.

3. Give an outline of the life of Lucretius, citing authorities; and state his views as to creation, sensation, disease and death. What are the Epicurean tenets as to the existence of the Gods, divine providence, religion, and true piety? What was the Atomic theory, and whence derived?

III.

Translate :

Nempe hæc assidue : jam clarum mane fenestras
Intrat et angustas extendit lumine rimas,
Stertimus, indomitum quod despumare Falernum
Sufficiat quinta dum linea tangitur umbra.
"En quid agis? siccas insana Canicula messes
Jamdudum coquit, et patula pecus omne sub ulmo est."
Unus ait comitum. "Verumne? itane? ocius adsit
Huc aliquis! nemon'?" Turgescit vitrea bilis,
Finditur, Arcadiæ pecuaria rudere dicas.

Jam liber et bicolor positis membrana capillis,
Inque manus chartæ nodosaque venit arundo.
Tunc queritur, crassus calamo quod pendeat humor,
Nigra quod infusa vanescat sepia lympha;
Dilutas queritur geminet quod fistula guttas.
    O miser! inque dies ultra miser, huccine rerum
Venimus? at cur non potius, teneroque columbo
Et similis regum pueris, papparo minutum
Poscis, et iratus mammæ lallare recusas?
" An tali studeam calamo ?"   Cui verba? quid istas
Succinis ambages? tibi luditur; effluis amens.
Contemnere: sonat vitium percussa, maligne
Respondet viridi non cocta fidelia limo.
Udum et molle lutum es, nunc, nunc properandus et acri
Fingendus sine fine rota.

<div align="right">

PERSIUS, *Sat. III.*, v. 1-24.

</div>

1. What was the Roman division of the day and night? How was the period of noon determined before the use of dials?   To whom has the introduction of dials at Rome been ascribed?   What other mode of measuring time?   What hour is indicated by *quinta umbra?*   How many *lineæ* were there?   In what two senses may *quinta hora* be taken? Which do you prefer, and why?

2. Write notes on *liber, membrana, chartæ, arundo,* and *sepia;* and give an account of other writing materials used by the Romans.   Illustrate parts of this extract by parallels from Horace.

3. Explain the terms *sonat vitium percussa, non cocta, fidelia, olla, amphora, urceus, udum lutum, acri rota.* What was an *obba?*   What was *opus doliare?*   Expand EX·OF·FIG.   Describe Samian ware.

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

HONORS.

LATIN.

Examiners : { REV. JOHN MCCAUL, LL.D.
Thos. Moss, M.A.

I.

Translate :

Tibi haec cruenta serta texuntur manu,
  Novena quae serpens ligat :
Tibi haec Typhoeus membra quae discors tulit,
  Qui regna concussit Iovis.
Vectoris istic perfidi sanguis inest,
  Quem Nessus expirans dedit.
Oetaeus isto cinere defecit rogus,
  Qui virus Herculeum bibit.
Piae sororis, impiae matris, facem
  Ultricis Althaeae vides.
Reliquit istas invio plumas specu
  Harpyia, dum Zeten fugit.
His adice pennas sauciae Stymphalidos,
  Lernaea passae spicula.
Sonuistis, arae ! Tripodas agnosco meos,
  Favente commotos dea !
Video Triviae currus agiles,
  Non quos pleno lucida vultu
  Pernox agitat ;
Sed quos facie lurida moesta,
Cum, Thessalicis vexata minis,
Coelum freno propiore legit.

Sic face tristem pallida lucem
Funde per auras!
Horrore novo terre populos;
Inque auxilium, Dictynna, tuum
Pretiosa sonent aera Corinthi!
Tibi sanguineo cespite sacrum
Solemne damus!
Tibi de medio rapta sepulcro
Fax nocturnos sustulit ignes;
Tibi mota caput
Flexa voces cervice dedi;
Tibi funereo de more iacens
Passos cingit vitta capillos;
Tibi iactatur
Tristis Stygia ramus ab unda;
Tibi nudato pectore, Maenas,
Sacro feriam brachia cultro.
Manet noster sanguis ad aras!

<div align="right">SENECA, Medea, vv. 771-811.</div>

1. Write notes on *Phœbe, novena, vectoris, sanguis, piæ sororis, Stymphalidos, freno propiore, æra Corinthi, mota caput.*

2. Discuss the question as to the authorship of Seneca's tragedies.

3. Give scales of the metres used by Seneca, and point out peculiarities. Distinguish the changes of metre in the foregoing extract.

4. Mention ancient authorities on Latin metre.

II.

Translate:

Poematos dramatici vel activi genera sunt quattuor: apud Græcos tragica, comica, satyrica, mimica; apud Romanos, prætextata, tabernaria, Atellana, planipes.

Exegetici vel enarrativi species sunt tres, angeltice, historice, didascalice. Angeltice est, qua sententiæ scribuntur, ut est Theognidis liber, item chriæ. Historice est, qua narrationes et genealogiæ componuntur, ut est Hesiodi Γυναικῶν κατάλογος, et similia. Didascalice est, qua comprehenditur philosophia Empedoclis et Lucretii, item astrologia, ut Φαινόμενα Arati et Ciceronis, et Georgica Virgilii, et his similia.

Κοινοῦ vel communis poematos species prima est heroica, ut est Iliados et Æneidos: secunda lyrica, ut est Archilochi et Horatii.

DIOMEDES.

Write notes on *satyrica, mimica, prætextata, tabernaria, Atellana, planipes, chriæ, didascalice, heroica*, and *lyrica*, introducing the names of authors where you can.

III.

Translate :

Cujus vis fieri, libelle, munus ?
Festina tibi vindicem parare,
Ne nigram cito raptus in culinam
Cordyllas madida tegas papyro,
Vel thuris piperisque sis cucullus.
Faustini fugis in sinum ! sapisti.
Cedro nunc licet ambules perunctus,
Et frontis gemino decens honore
Pictis luxurieris umbilicis ;
Et te purpura delicata velet,
Et cocco rubeat superbus index :
Illo vindice nec Probum timeto.

MARTIAL, *Epig.* iii., 2.

1. Give a scale of the metre.

2. Cite passages from Catullus, Horace, Persius, and Ovid, in illustration of portions of the first seven verses.

3. Compare the account of a book in vv. 8-11 with those given by Tibullus and Ovid, and describe a Roman volume.

4. Give an account of the *librarii* and *bibliopolæ*.

5. Of what ages are the most ancient manuscripts of the Greek and Latin Classics ?

6. Give the names of the principal collectors of manuscripts, teachers, scholars, editors and printers of the 15th century.

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ANNUAL EXAMINATIONS: 1864.

TRANSLATION INTO GREEK PROSE AND VERSE.

Examiners: { Rev. John McCaul, LL.D.
Thomas Moss, M.A. }

I.

Cleon, though master of impudence which nothing could abash, seems to have been not wholly unconscious of his own emptiness and incapacity; and he strove to cover his intrinsic feebleness by a show of energy, which cost him no effort, and was exerted at the expense or the risk of the state. He wished to be known as the blunt and straightforward man, of resolute counsels, and strong measures; who kept the good of the people steadily in view, and who would always take the shortest course to arrive at it. He thus gained credit for plain good sense and honest patriotism, while he watched every turn of the popular inclination, that he might anticipate or go beyond it. It belonged to the policy of Cleon to treat the allies of the commonwealth with despotic harshness, as subjects who had no rights that could be allowed to interfere with the will of their sovereign, and were bound to submit without a murmur to all his exactions. Probably, indeed, he had private motives, besides the affectation of patriotic zeal, for taking the most violent side on every question which arose between Athens and her confederates. The more he was dreaded as an advocate of stern measures, the more important it was to retain or silence him. He barked, as well as fawned, for food.

II.

Sure I am, 'tis madness,
Inhuman madness, thus from half the world
To drain its blood and treasure, to neglect

Each art of peace, each care of government ;
And all for what ?   By spreading desolation,
Rapine, and slaughter o'er the other half,
To gain a conquest we can never hold.
I venerate this land.   Those sacred hills,
Those vales, those cities, trod by saints and prophets,
By God himself, the scenes of heavenly wonders
Inspire me with a certain awful joy.
But the same God, my friend, pervades, sustains,
Surrounds and fills this universal frame ;
And every land, where spreads his vital presence,
His all-enlivening breath, to me is holy.
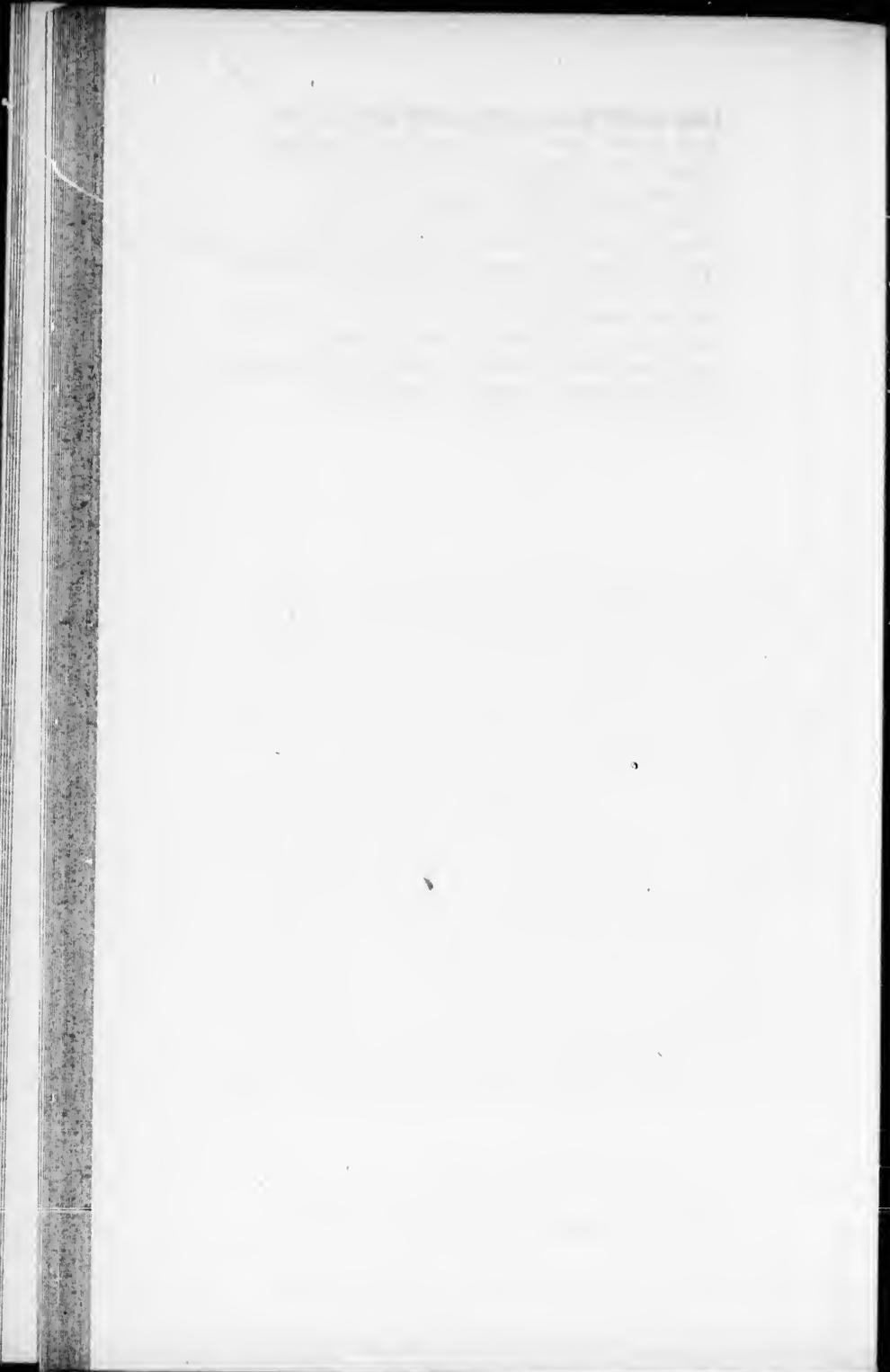
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CANDIDATES FOR B.A.

ASTRONOMY AND ACOUSTICS.

Examiner: J. B. Cherriman, M.A.

1. Describe the nature of the apparent motion of the fixed stars as seen from a given place on the earth.

Describe the points of similarity and difference at two places according as they have the latitude or the same longitude.

2. Show how the latitude of a place may be found from the meridian altitude of a known star.

If two stars have the same altitude in crossing the meridian of a place in north latitude on opposite sides of the zenith, prove that either the sum of their declinations is double the latitude, or the difference double the co-latitude.

3. What is the nature of the sun's apparent path in the celestial sphere as seen from the earth's centre?

What are the zones? Account for the changes in the length of day and night at places in the different zones.

4. Mention the instruments essential to an astronomical observatory, and the nature of the observations each is designed to make.

How is the sidereal clock adjusted?

5. Distinguish between sidereal and solar time.

What time does a common watch show?

How can the watch be checked by a sun-dial?

6. What is the nature of the earth's path about the sun and the law of her motion therein?

How is this ascertained, and how are the actual dimensions of this orbit determined?

Shew that this motion will account for the change of seasons. Can the four seasons be equal in length?

7. Describe and explain the moon's phases.

What is the age of the moon when she rises about noon, and what about midnight?

8. Explain solar and lunar eclipses.

Why does not an eclipse happen every time the moon is in conjunction or opposition?

9. Mention the chief points which distinguish a planet from a fixed star and from a comet.

10. Define an *undulation*, and give examples of different kinds of undulations that may occur in the production of sound.

On what elements of the undulation do the pitch, intensity, and quality of a musical note depend?

11. Describe the mode of vibration of the air in a pipe closed at both ends, when sounding its fundamental note or its harmonics.

What is the lowest note that can be produced by such a pipe of given length?

12. Describe the formation of the diatonic and chromatic scales in music. Why is it necessary to *temper*, and what is the scale of equal temperament?

If a person ascend from a note by perfect fifths and alternately descend by perfect thirds, how near can he come to the octave?

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CANDIDATES FOR B.A.

RIGID DYNAMICS AND HYDRODYNAMICS.
HONORS AND SCHOLARSHIPS.

Examiner: J. B. CHERRIMAN, M.A.

1. Demonstrate the existence of a set of principal axes of moments of inertia at every point of a body; and shew that if the moments are known about one set of principal axes, that about any line whatever can be found from them.

If parallel lines be taken, shew that the locus of those which have the same moment of inertia about them is a circular right cylinder.

2. When a rigid body moves about a fixed horizontal axis, find the time of a small oscillation.

A thin circular arc oscillates about a horizontal axis which is perpendicular to the plane of the arc and passes through one end of the chord drawn through its centre of gravity parallel to its base; the length of the simple isochronous pendulum is equal to this chord.

3. Enunciate the steps of the proof that the motion of a rigid body about a fixed point, when no forces act on it, can be represented by the rolling of the central ellipsoid on a fixed plane.

If a plane disk be thus moving about a point in its own plane such that the principal moments of inertia in that plane are equal, and at any instant the angular velocity be ω about an axis which makes equal angles with the principal axes, shew that the normal to the disk completes a revolution in the time $\dfrac{\pi}{\omega}$.

4. Explain accurately what is meant by saying that the motion of a free rigid body is reducible to one of rotation and one of translation.

Rotations about parallel axes being simultaneously impressed on a free rigid body at rest, shew that the resultant motion is either one of rotation or one of translation, and determine it in each case.

5. A free rigid body at rest is struck by given impulses, determine the initial instantaneous motion.

If the impulses consist of a single blow (X, Y, Z) at the centre of gravity (the principal axes there being axes of co-ordinates, and A, B, C the principal moments of inertia) and a single couple (L, M, N), shew that in order that the initial motion may be one of rotation,

$$\frac{LX}{\dfrac{1}{B} - \dfrac{1}{C}} = \frac{MY}{\dfrac{1}{C} - \dfrac{1}{A}} = \frac{NZ}{\dfrac{1}{A} - \dfrac{1}{B}} .$$

6. State and prove the principle of the *conservation of areas*. Comparing this with the principle of *vis viva*, state what forces will disappear in the equations formed by aid of one of these principles, which would appear in those formed from the other.

Two heavy balls are connected by a weightless rod which is set in motion about the centre of gravity of the balls as a fixed point, determine the angular velocities of the rod.

7. When a fluid rotates in relative equilibrium about a fixed axis under the action of assigned forces, determine the pressure at any point.

A thin hollow tube, forming a rectilineal angle, contains water, and is made to revolve with a given angular velocity (ω) about a vertical axis through its vertex inclined at given angles (a, β) to the legs. If l be the length of the fluid-filament, shew that it may separate at the lowest point if

$$\omega^2 > \frac{2g}{l} \left(\frac{\cos a}{\sin^2 a} + \frac{\cos \beta}{\sin^2 \beta} \right) .$$

8. Having given the impressed force at a point of a fluid in direction of its motion at that point, investigate the relation between the pressure and velocity.

What further considerations must be introduced, before the pressure and velocity can be actually ascertained?

9. To find the time of emptying a vessel through a small orifice. Point out the various assumptions made in your investigation.

If the vessel be the surface formed by the revolution of the curve $y^4 \propto x^n$ about the axis of x (which is vertical, the vertex

being downwards,) shew that the volumes discharged during the former and latter halves of the time of emptying it are in the ratio $2^{\frac{n+2}{n}} - 1$ to 1.

10. To determine the resistance on the anterior surface of a solid of revolution moving in the direction of its axis through a quiescent fluid.

What circumstances vitiate the common theory of resistances?

A small bubble of glass filled with hydrogen ascends in the air (supposed of uniform temperature,) the wind blowing horizontally, obtain expressions for the horizontal and vertical accelerations of the bubble in any position.

11. Investigate the differential equation which expresses the motion in a column of air (supposed to retain the same temperature) arising from a small disturbance excited in it, and assuming the solution of this equation, examine in what cases two waves or only one will be propagated.

If the disturbance be expressed by $c \sin \frac{2\pi}{\lambda}(at - x)$, find

the length of the wave, and if two such waves be super-imposed, find the period of the *beats*.
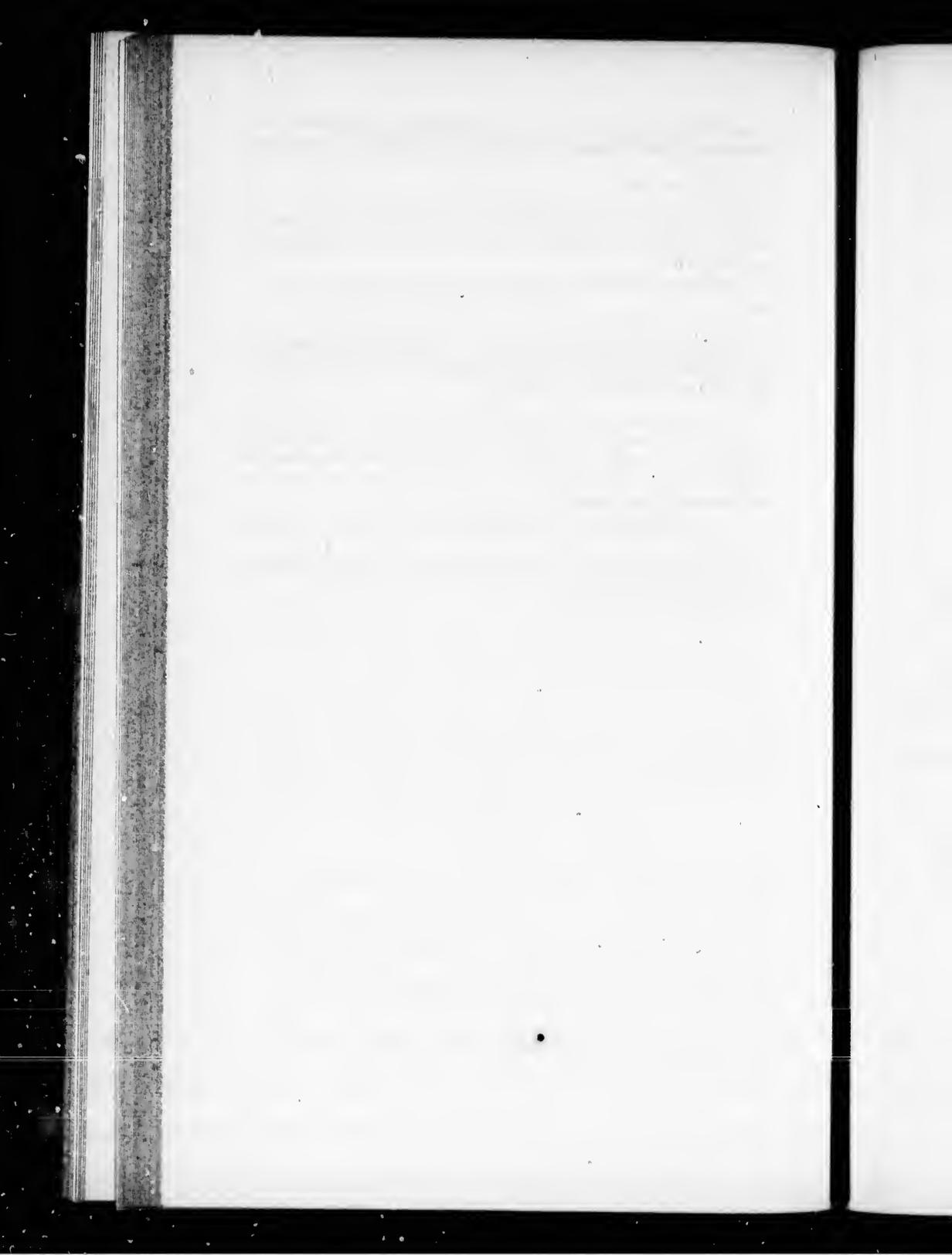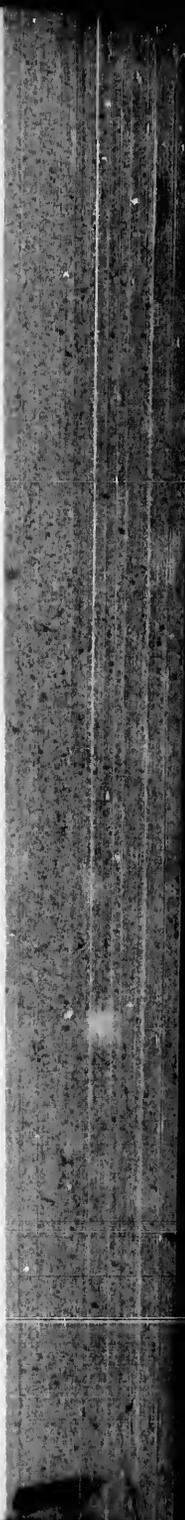
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ANNUAL EXAMINATIONS : 1864.

CANDIDATES FOR B.A.

SPHERICAL TRIGONOMETRY AND ASTRONOMY.

HONORS.

Examiner : J. B. Cherriman, M.A.

1. Investigate the properties of the polar triangle.

If one side of a triangle be a quadrant, the three angles must be each less than a right angle, or each greater than a right angle.

2. Shew how to find the area of a spherical triangle.

If E be the spherical excess in a triangle where C is $90°$,

$$\tan \tfrac{1}{2} E = \tan \frac{a}{2} \; \tan \frac{b}{2} \; .$$

3. Prove the following formulas in a triangle.

    (i.) $\cos c = \cos a \cos b + \sin a \sin b \cos C$;

    (ii.) $\cot a \sin b = \cot A \sin C + \cos b \cos C$;

    (iii.) $\tan \tfrac{1}{2} (A{-}B) = \dfrac{\sin \tfrac{1}{2} (a{-}b)}{\sin \tfrac{1}{2} (a{+}b)} \cot \tfrac{1}{2} C.$

    (iv.) $\sin B \sin C - \sin b \sin c$

          $= \cos B \cos C \cos a + \cos b \cos c \cos A.$

Deduce others from these by aid of the polar triangle.

4. In a triangle, having given a, b, A, solve it, finding c directly either by a subsidiary angle or a geometrical construction, and shew how the ambiguity appears in this solution.

Discuss fully the case where $A > 90°$, $b > 90°$, and deduce the corresponding case when A, B, a, are given.

5. Prove Legendre's Theorem, and shew how it may be employed to obtain an approximate solution of the triangle in the previous question, when the sides are small compared with the radius of the sphere.

6. Prove that there can be only five regular solids.

If F, S, E, be the number of faces, solid angles, and edges in one of these, shew that $3pFS = 4E^2$, where p is 3, 4, or 5.

7. Find the local times of sunrise and sunset for a given day at any place, and shew that their sum is nearly 12 hours.

Find the correction to the time of sunrise at a place to adapt it to another of nearly the same latitude.

8. Describe the errors of adjustment to which a transit instrument is liable.

Determine the error of deviation by the method of high and low stars.

9. To find the position of the ecliptic in the heavens at any time with reference to the meridian and horizon of any place.

Describe the changes of inclination of the ecliptic and horizon in consequence of the diurnal rotation, and find when this inclination increases fastest.

How is it ascertained when the first point of Aries is on the meridian?

10. Describe the nature of the correction called *parallax*.

Find the errors thence arising in the hour angle and declination of a body, computed from an observed zenith distance.

At what time of the day should the observation be made in order that the former of these errors may be the least possible?

11. Calculate the moon's phase, supposing her to move in the ecliptic; and when her angle of elongation is 60°, compare the apparent areas of the dark and bright parts.

Retaining the same supposition, explain the changes of inclination to the horizon of the line joining her horns.

12. To determine when a superior planet will be a morning or evening star.

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University of Toronto.

PURE MATHEMATICS.

Examiners: { J. B. CHERRIMAN, M.A.
{ REV. W. JONES, B.A.

i. Examine the forms of the proper fraction $\frac{a}{b}$ in its lowest terms when it is reducible to (1) a terminating, (2) a mixed circulating, (3) a pure circulating decimal.

In (1), find the number of decimal places;

In (2), find the number of places before the circle;

In (3), if a remainder $b - a$ occur, the remaining figures of the circle can be found by subtracting from 9 each of the previous ones in order.

2. Give Euler's proof of the Binomial Theorem for negative and fractional indices.

If $c_1 c_2 c_3 \ldots \ldots$ be the number of combinations of n things taken $1, 2, 3, \ldots \ldots$ together, shew that

(i.) $1 + c_1^2 + c_2^2 + \ldots \ldots + c_n^2 = \dfrac{\lfloor 2n}{\{\lfloor n\}^2}$.

(ii) $1 . c_r + c_1 c_{r+1} + c_2 c_{r+2} + \ldots c_{n-r} . c_n = \dfrac{\lfloor 2n}{\lfloor n+r . \lfloor n-r}$

(iii)

$1 . c_{2r} - c_1 c_{2r-1} + c_2 c_{2r-2} - \ldots + (-1)^{r-1} c_{r-1} c_{r+1} + (-1)^r c_r^2$

$$= (-1)^r . \dfrac{\lfloor n}{\lfloor r . \lfloor n-r}.$$

iii. Obtain the exponential value of x from the equation $x + \dfrac{1}{x} = 2\cos\theta$.

If in any triangle $2\cos A = x + \dfrac{1}{x}$, $2\cos B = y + \dfrac{1}{y}$, prove $2\cos C = -\left(xy + \dfrac{1}{xy}\right)$, and shew that the two values of $bx + ay$ are c and $c + 4\sqrt{-1}\,\dfrac{\text{Area}}{c}$.

4· Investigate expressions for the radii of the inscribed and circumscribed circles of a triangle. Also express the area of a triangle as a symmetrical function of the sides and angles.

If O_1, O_2, O_3 be the centres of the escribed circles of a triangle which touch the sides a, b, c, respectively, and $O_2 O_3 = a'$, $O_3 O_1 = b'$, $O_1 O_2 = c'$ shew that the area $O_1 O_2 O_3$ equals

(i) $\dfrac{1}{4}\left(aa' \sec \dfrac{A}{2} + bb' \sec \dfrac{B}{2} + cc' \sec \dfrac{C}{2}\right).$

(ii) $\dfrac{1}{6}\left(a'b' \sin \dfrac{C}{2} + b'c' \sin \dfrac{B}{2} + c'a' \sin \dfrac{A}{2}\right).$

5. State how to transform an equation whose roots are a, b, c, ...into four other equations, the first of which has roots $-a$, $-b$......; the second ma, mb .....; the third $a+h$, $b+h$,...... and the fourth $\dfrac{1}{a}$, $\dfrac{1}{b}$ ......

Prove the second and fourth cases.

If the sides of a triangle be the roots of the equation $\phi(x) = x^3 + 2p\,x^2 + q\,x - r = 0$, shew that the radii of the four circles which touch the sides of the triangle are given by the equation $6\,f(p)\,y^4 - 6\,A f'(p)\,y^3 + 3\,A^2 f''(p)\,y^2 - A^3 f'''(p)\,y + A^4 = 0$, where A is the area of the triangle, and $f(x) = x\phi(x)$.

vi. Investigate the geometrical properties which are implied in the terms *pole* and *polar* in a conic, and shew that any line is cut harmonically by the curve, the pole, and polar.

Having given the locus of the pole, shew how to find the curve always touched by the polar with reference to a given conic, and take for example the case where the conic is an ellipse, and the locus of the pole is a parabola which has the same focus and latus-rectum.

7. Define a differential co-efficient, and give a geometrical interpretation of it. Hence, or in any other way, shew that if the

differential co-efficient of a function be positive, the function increases as the variable increases.

Verify the theorem $\dfrac{d^2u}{dx.dy} = \dfrac{d^2u}{dy.dx}$

(i) When $u = \tan^{-1} \dfrac{x + y^2}{y + xy}$ (ii) when $u = e^{x^y}$

8. Integrate the following functions :

(i) $\tan x$ (ii) $\sec^2 x \log \tan x$.

(iii) $\tan^{-1} \sqrt{\dfrac{x}{a}}$ (iv) $\dfrac{1 - x \cos a}{1 + 2x \cos a + x^2}$

and find a formula of reduction for $\int \sin^m \theta . \cos^n \theta d\theta$.

ix. In any spiral, $u = \dfrac{1}{r} = f(\theta)$, prove the formulas

$$\dfrac{1}{p^2} = u^2 + \left(\dfrac{du}{d\theta}\right)^2, \quad \dfrac{1}{u^4} = p^2 + \left(\dfrac{dp}{d\phi}\right)^2,$$

where ϕ is the angle made by p with a fixed line.

If at a point where r is finite, $\dfrac{dr}{d\theta} = 0$ and change sign, there is an apse; if $\dfrac{dr}{d\theta} = \infty$, and change sign, there is a cusp; if $\dfrac{dr}{d\theta} = 0$ or ∞ and do not change sign, there is a point of inflexion.

Draw the forms at the pole of the curves
$$r^2 = a^2\theta, \ r = a\theta^2, \ r = a\theta.$$

x. State and prove Newton's Lemma iv., Section 1.

In a spiral given by the equation $r^2 \propto p^2 \pm c^2$, p being the perpendicular from the pole on the tangent, the vectorial area swept out by r is always proportional to that swept out by p.

11. If $\phi(a, \beta, \gamma) = 0$ be a homogeneous equation of two dimensions in a, β, γ, the trilinear co-ordinates of a point, shew that the equation of the tangent at a', β', γ', to the conic section it represents is

$$a \dfrac{d\phi}{da'} + \beta \dfrac{d\phi}{d\beta'} + \gamma \dfrac{d\phi}{d\gamma'} = 0.$$

Hence find the condition that the straight line $l\,a + m\,\beta + n\,\gamma = 0$ may touch the conic section $\dfrac{\lambda}{a} + \dfrac{\mu}{\beta} + \dfrac{\nu}{\gamma} = 0$.

12. To find the normal to a surface at a proposed point, or the locus of the normals if there should be more than one at the point.

If POp be a diameter of a central surface, O being the centre, and a section be made by a plane containing the normal at P and passing through O; then if the circle of curvature at P to the curve of section pass also through p, the angle between OP and the normal will in general be the greatest possible.

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

NATURAL PHILOSOPHY,
HONORS.

Examiners: { J. B. CHERRIMAN, M.A.
{ REV. W. JONES, B.A.

i. State the senses in which the term *resultant* is used with reference to a set of forces, mentioning any theorems involved in such use.

Prove that the algebraic sum of the moments of two forces, in the same plane, about any point in it, is equal to the moment of their resultant about that point, and examine what this means when the two forces are equal, parallel, and acting in opposite senses.

If three forces in one plane are not reducible to a single resultant force, shew that there is a point in the plane about which their moments are equal.

2. Investigate formulas to find the centre of gravity of any solid by means of polar co-ordinates.

Apply them to find the centre of gravity of a hemisphere whose density is constant along any radius, but varies as the angular distance of the radius from the axis of the solid.

iii. Find the attraction of a uniform thin rod, every point of which attracts inversely as the square of the distance, on a point situated in the perpendicular bisecting it.

Three such rods form a triangle, and a particle is placed at the centre of the circumscribing circle; shew that it will not remain at rest unless the triangle be equilateral.

4. A particle of elasticity e is projected from a given point with a given velocity v in a direction inclined at a given angle to the horizon; shew that it will describe a series of parabolic arcs.

Find the sum of the parabolic areas which it will describe.

v. A particle descends a smooth inclined plane; find the velocity acquired, and the time of descent.

If an inelastic particle descend successively down a series of n such planes each being inclined to the previous one at the same angle α, and h be the vertical height descended, H the sum of the heights due to the several velocities at the ends of the planes (excepting the last), prove that the square of the velocity at the end of the last is

$$2g\,(h - H\sin^2\alpha).$$

Deduce the velocity acquired in falling freely down a smooth curve in a vertical plane, and calculate the effect on this velocity of a medium which resists uniformly, by considering the effect of a uniform friction on the planes.

6. Compare the forces by which a body, attracted separately to two centres of force, may describe the same orbit in the same periodic time.

A body describes the same ellipse in the same periodic time under the action of forces in the centre and focus; shew that the respective velocities at any point are in the ratio of the focal distance to the semi-axis major.

7. Obtain the differential equation which determines the pressure at any point of a fluid acted on by given forces.

Hence shew that in an inelastic fluid at rest under the action of gravity, the pressure varies as the depth.

Equal volumes of three fluids whose densities are ρ, $\mu\rho$, $\mu^2\rho$ fill a vertical circular tube; shew that the radius which meets the common surface of the first and last is inclined to the vertical at an angle $\tan^{-1}\sqrt{3}\,\dfrac{\mu+1}{\mu-1}$.

viii. Shew how to determine the stability or instability of the equilibrium,

(1), where a heavy body rests with one point of its convex surface in contact with a fixed rough horizontal plane;

(2), when a heavy shell containing fluid rests in like manner.

9. Find the primary and secondary foci of a small pencil after oblique refraction through a plate of thickness t.

If the secondary foci at the two refractions be equally distant from the origin of light, shew that the angle of incidence of the axis of the pencil is $\sin^{-1}\sqrt{\dfrac{\mu^2 u^2 - t^2}{u}}$.

x. Describe Gregory's and Cassegrain's telescopes, and point out the defects in the image formed by each.

Shew that in the former the aberrations produced by the mirrors are in the same direction, while in the latter they partly, but cannot wholly, counteract each other.

xi. Investigate the formulas by which the position of the tertiary rainbow can be found, and shew that the breadth of the bow is

$$\frac{2}{\mu}\sqrt{\left(\frac{16-\mu^2}{\mu^2-1}\right)}\delta\mu\ ,$$

where $\delta\mu$ is the difference of refractive index for the extreme rays. What circumstance would cause the breadth of the bow to be actually greater than this?

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i. An event, of which the *a priori* probability is p, is affirmed by two independent witnesses whose veracities are v, v', determine the probability of the event from this evidence.

Suppose the affirmation to be that a specified ticket was drawn from a bag known to contain n different tickets.

Shew also that in this case, the probability of a specified ticket having been drawn, as derived from the testimony of a single individual whose veracity is wholly unknown and is equally likely to be anything from 0 to 1, is

$$\frac{1}{(n-2)^2} \left\{ (n-1) \log (n-1) - (n-2) \right\},$$

if n be different from 2. Also find it when $n = 2$.

ii. If n be a prime number, the powers (from 1 to $\overline{n-1}$ inclusive) of any one of the imaginary roots will produce the other imaginary roots of the equation $x^n - 1 = 0$.

How must this statement be modified if n be not a prime number?

Shew that the roots of $x^{pq} - 1 = 0$, where p, q are primes, are given by the formula

$$\left(\cos \frac{2\pi a}{p} + \sqrt{-1} \, \sin \frac{2\pi a}{p} \right) \left(\cos \frac{2\pi \beta}{q} + \sqrt{-1} \, \sin \frac{2\pi \beta}{q} \right)$$

where a, β are the positive integral solution of $p\beta + qa = $ any integer from 0 to $(pq-1)$ inclusive.

iii. Examine the relation in which the conic $l\alpha^2 + m\beta^2 + n\gamma^2 = 0$ stands to the triangle of reference ABC.

Shew that it represents a circle, if

$$\frac{l}{\sin 2A} = \frac{m}{\sin 2B} = \frac{n}{\sin 2C},$$

and a rectangular hyperbola, if

$$l + m + n = 0.$$

4. Shew that the symbols of differentiation are governed by the same laws of combination as ordinary algebraic symbols. Hence shew that

$$e^{\frac{1}{\sqrt{m^2+n^2}}\frac{d}{dx}}(e^{nx}\sin\,mx) = e^{nx+\cos a}\sin(mx+\sin a),$$

where $\tan a = \dfrac{m}{n}$.

5. What is meant by the intrinsic equation to a curve? Explain the method of tracing a curve from its intrinsic equation.

Trace the curves (i) $s = a \sin 3\phi$.   (ii) $s = a \cos \frac{4}{3}\phi$.

(iii) $\phi = \sin \dfrac{s}{a}$.

vi. Prove that $\displaystyle\int_b^a f(x)dx =$

$$f(b).(a-b) + f_1(b).\frac{(a-b)^2}{\lfloor 2} + \cdots + f_{n-1}(b).\frac{(a-b)^n}{\lfloor n}$$

$$+ \frac{1}{\lfloor n} \int_b^a (a-x)^n f_n(x)\,dx,$$

where $f_n(x)$ denotes the nth derivative of $f(x)$.

Find $\displaystyle\int_0^\infty \varepsilon^{-x^2}\,dx$, and obtain converging series for $\displaystyle\int_0^a \varepsilon^{-x^2}\,dx$, both when a is $>$ and $< \frac{1}{2}\sqrt{2}$.

7. Shew how to determine the general nature of the curve of section of a surface of the second order by a plane.

If the section of the surface $\dfrac{yz}{a^2} + \dfrac{zx}{b^2} + \dfrac{xy}{c^2} = 1$

by the plane $lx + my + nz = p$ be a rectangular hyperbola, shew that $\dfrac{1}{la^2} + \dfrac{1}{mb^2} + \dfrac{1}{nc^2} = 0$.

8. Obtain an equation to determine the tension at any point of a uniform flexible string, when acted on by any central force.

A uniform string which occupies one half of an elliptic tube bounded by the major axis, is attracted by two equal centres of force $\left(\frac{\mu}{r^2}\right)$, one in each focus; shew that the tension at any point P is

$$2\,\mu\,\kappa\,a\,.\left(\frac{1}{b^2}\;-\;\frac{1}{SP.HP}\right).$$

9. A particle is projected with a velocity u, in a direction making an angle a with the axis of x, and is acted on by a constant force f parallel to the axis of y; if the resistance $= k$ (velocity)^2 shew that the differential equation to its path is

$$\frac{d^2y}{dx^2} + \frac{f}{u^2\cos^2 a}\,e^{2kx} = 0.$$

Another particle is projected with the same velocity in a direction inclined at an angle β to the axis of x; shew that when equal lengths of their paths have been described by the two particles their directions are parallel.

x. The central force varying as distance, determine the dimensions and position of the orbit from the circumstances of motion at an assigned point.

If at any point a small change (δa) be made in the direction of motion, find the consequent changes in the axes of the orbit; and shew that if the change take place at an extremity of a latus-rectum, then

$$\frac{\delta b}{b} = \sqrt{\mu}\; e\,\delta\,a,$$

$2b$, μ, e being the minor axis, absolute force, and excentricity.

11. What is the condition that the deviation of a ray refracted through a prism in a principal plane may be a minimum? Obtain a formula from which the refractive index of a substance can be determined, and explain how it is done (i.) for solids, and (ii.) for fluids.

Shew that rays must be incident upon a prism within an angular distance $\sin^{-1}\left\{\dfrac{\sin{(i - a)}}{\sin a}\right\}$, in order that they may be refracted through the prism in a principal plane, i being the refracting angle of the prism, and a the critical angle of the medium.

xii. When assigned forces act on any system, explain what is understood by the "work done" by them, and examine in what cases it will be measured by the change of *vis viva* of the system.

The chamber of an air-gun forms part of the barrel (which is of uniform bore) and contains air of pressure p, the length occupied being a. If the bullet be resisted by a uniform friction f, find the "work done" during the discharge, and shew that it will be the greatest possible when the length of the barrel is $\frac{p}{f}a$.

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NEWTON, SECTIONS IX. & XI., AND LUNAR THEORY.

HONORS.

Examiner: Rev. W. Jones, B.A.

1. The orbit in which a body moves revolves round the centre of force with an angular velocity, which always bears a fixed ratio to that of the body; shew that the body may be made to move in the revolving orbit in the same manner as in the orbit at rest by the action of a force tending to the same centre.

What modification must be made in the proof, if the motion of the orbit be retrograde, and the angular velocity of the orbit be (i) greater and (ii) less than that of the body moving in it?

Draw the figure of the proposition in each of these cases.

If the polar equation to VP be given, shew how to find that to Vp.

2. A body moves in an orbit nearly circular under the action of a force $= \dfrac{1}{r^5} f(r)$ at a distance r; shew that the apsidal angle of the orbit $= \pi \sqrt{\dfrac{f(a)}{af'(a)}}$, where a is the greatest value of r.

Conversely having given the apsidal angle, find the law of force.

3. Two bodies S and P revolve a third T so that P describes an orbit much interior to that of S; explain what is meant by the disturbing force on P relatively to T, and find expressions for (i) the tangential disturbing force on P, (ii) the central disturbing force on P, and (iii) the whole gravitation of P to T.

4. The moon is at P in her orbit supposed elliptic, and a tangent PY is drawn in the direction of her motion; shew that the angle TPY is acute when she is moving from apogee to perigee, and obtuse when from perigee to apogee.

Examine the effect of the central disturbing force on the motion of the moon's apsides, when the apsidal line is in quadrature.

5. Examine the effect of the ablatitious force on the inclination of P's orbit to that of S, when the node lies between quadrature and farther syzygy.

Under what circumstances will the inclination be the least possible?

6. Investigate the differential equation of the moon's radius vector

$$\left(\frac{d^2u}{d\theta^2} + u\right)\left(1 + 2\int\frac{T}{h^2u^3}\,d\theta\right) = \frac{P}{h^2u^2} - \frac{T}{h^2u^3}\,\frac{du}{d\theta}.$$

7. Given $\dfrac{d^2u}{d\theta^2} + u = \ldots + G\,\cos(p\theta+h) + \ldots$

integrate the equation, and shew that this term will fall in the integration by one order, if p is nearly equal 1.

State the different cases in which terms of a higher order than that required must be retained in the differential equations.

8. Having given

$$\frac{P}{h^2u^2} = a\left[1 - \frac{3}{4}\,k^2 + \frac{3}{4}\,k^2\cos 2\,(g\theta-\gamma) - \frac{1}{2}\,m^2\right.$$

$$\left. - \frac{3}{2}\,m^2\cos\,\{(2-2m)\theta - 2\beta\}\right]$$

$$\frac{T}{h^2u^2} = -\frac{3}{2}m^2\sin\{(2-2m)\theta - 2\beta\} + 3m^2e\sin\{(2-2m-c)\theta$$

$$- 2\beta + a\},$$

find u to the 2nd order.

9. Explain the physical meaning of the term
$$-\tfrac{1}{4}k^2\sin 2(gpt - \gamma)$$
in the expression for the moon's longitude.

10. Define mean place, and shew that as the sun moves from perigee to apogee, the moon's true place is behind her mean place.

11. Shew that the moon's orbit is every where concave to the sun.

Draw a diagram shewing her path about the sun during a year.

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CANDIDATES FOR B.A.

PROBLEMS.

HONORS.

Examiners: { J. B. CHERRIMAN, M.A.
Rev. W. JONES, B.A.

1. Two points, C D are taken in a given line AB, find the mean length of CD.

2. If the arcs which bisect the angles B, C, of a spherical triangle ABC, meet in O; then will

$$\cos \frac{1}{2} C \cos AOC + \cos \frac{1}{2} B \cos AOB = - \cos \frac{1}{2} A.$$

3. From the ends A, B, of any diameter of a given small circle on a sphere, arcs are drawn perpendicular to a given great circle; prove that the sum of their sines is invariable.

4. The base and area of a spherical triangle are given; prove that the arc joining the middle points of its sides is of given length.

5. A quadrant of a circle describes a hemisphere by revolving uniformly about one of its bounding radii, while a point traces out a spiral by moving uniformly along the quadrant from one end to the other; shew that the surface of the hemisphere is divided into two equal portions by the contour formed by the spiral and the quadrant in its first position.

6. Determine the longest and shortest durations of twilight at a given place.

7. Having given the ratio of the measurements from N. to S., and from E. to W., of the projection on Mercator's chart of a small circular island, find its latitude.

8. The loss of weight in a body at the earth's equator, in consequence of the diurnal rotation, is $\frac{1}{288}$th part of its apparent weight. If by an increase of this rotation, bodies at the equator ceased to have weight, in what ratio would the sidereal day be altered in length?

9. In an ellipse described under force to focus, determine the points where the following changes in the body's motion could respectively be made without altering the direction of the apse-line:

(a), a small change in velocity without change of direction;
(β), a small change in direction without change of velocity;
(γ), a change in both velocity and direction by a small impulse directed towards the centre of force.

10. In a plane lamina whose form is a regular polygon of n sides, r is the radius of the inscribed circle: prove that for the moment of inertia (Mk^2) about any line in its plane which passes through the centre,

$$k^2 = \frac{r^2}{12}\Big(3 + \tan^2\frac{\pi}{n}\Big).$$

11. A hollow vertical cylinder of length l, open at top, stands in the atmosphere. A tight smooth piston (without weight) being inserted and forced down to any depth, water is poured in above it so as to fill up the cylinder when equilibrium is attained. If a small hole be now opened in the surface of the cylinder above the piston at a distance h from the base, shew that the piston may be brought permanently to rest in either of two positions, provided

$$h > H, \text{ and } (h + H)^2 > 4Hl,$$

where H is the height of the water-barometer at the time.

12. Any uniform rigid body, whose figure is symmetrical with regard to an axis which is supposed to be rigidly connected with it, is allowed to fall under the action of gravity from rest in a position where this axis is horizontal, a point in this axis being fixed. Shew that the angle which the axis has described when the vertical pressure on the point is equal to the weight of the body, is the same in all cases.

13. A heavy rigid body, of which G is the centre of gravity, is supported at two fixed points A, B, in the same horizontal plane; if s, s' be the segments into which AB is divided by the vertical through G, z be the distance of G from AB, k the radius of gyration about a horizontal line through G perpendicular to AB, shew that when one of the points is suddenly set free, the vertical pressure on the other will be initially unaltered if

$$ss' = z^2 + k^2.$$

14. A rigid rod is balancing horizontally about its centre of gravity fixed, and a ball drops vertically upon it at such a distance from its centre that the moments of inertia of the ball at impact and the rod about this centre are equal. Examine whether under any circumstances the ball can begin to ascend after the impact.

If an elasticity could exist for which such would be the case, and the next impact of ball and rod occurred at the same point of the rod, prove that the latter would then remain at rest.

15. A solid uniform right circular cylinder, whose length is l and radius r, is freely movable about its axis which is fixed vertically. A smooth groove is cut in its surface in the form of a helix which is everywhere inclined to the horizon at an angle a, and a heavy particle runs through the groove, starting from the top, and passing out at the lower end; shew that the angular velocity (ω) acquired by the cylinder is given by

$$\omega^2 r^2 \left(1 + \frac{\lambda}{2} \right) \left(\tan^2 a + \frac{\lambda}{2} \sec^2 a \right) = 2gl,$$

where λ is the ratio of the masses of the cylinder and particle.

16. A thin straight tube is bent at a right angle, and one end is closed. The closed branch is placed horizontally, and the other vertically, being exposed to the atmosphere; mercury is now poured in so as to fill the vertical branch and occupy also half the horizontal branch (of which the length is l) and the tube is made to revolve about a vertical axis through its closed end with an angular velocity ω, so that when the state of relative equilibrium is attained, the horizontal branch is just clear of mercury; shew that

$$l\, e^{\frac{\omega^2}{2k} l^2} = 2 \int_0^l e^{\frac{\omega^2}{2k} r^2}\, dr,$$

where k is the ratio of pressure to density in air, and e is the Napierian base.
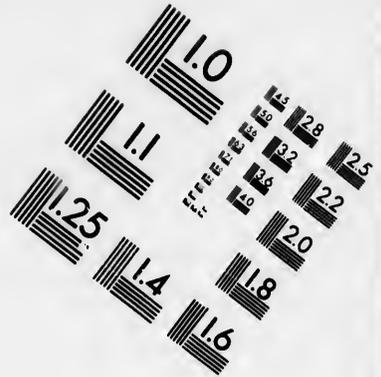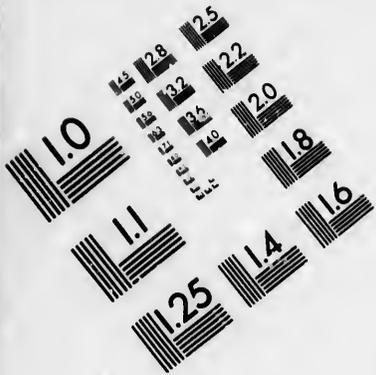
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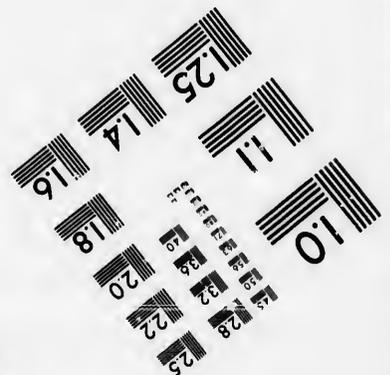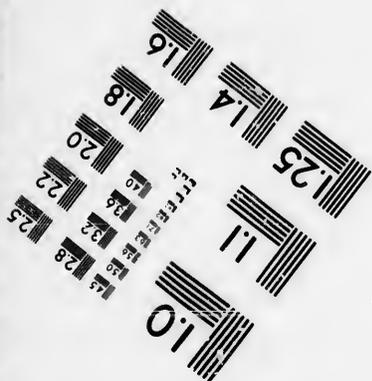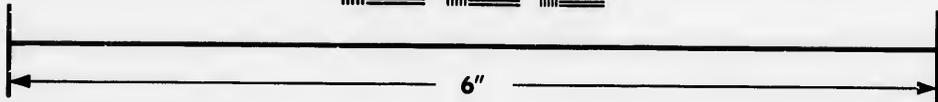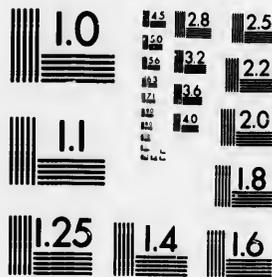
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PRINCE OF WALES' PRIZE.

HISTORY AND ETHNOLOGY.

Examiners: { D. Wilson, LL.D.
J. A. Boyd, M. A.

1. How was Sparta affected by the battle of Mantinea, B. C. 418.

2. In what respects did the battle of Chæroneia decide the fate of Greece?

3. Describe the origin and nature of the privileges enjoyed by the Latin colonies of Italy, and trace the causes and results of the social war, B. C. 90-88.

4. Trace the influence of Charlemagne on the political and ecclesiastical institutions of medieval Europe.

5. Construct a genealogical tree showing the Anglo-Saxon, Danish, and Norman relation by blood and marriage, of Edward the Confessor, Harold II., and William the Conqueror.

6. Trace the grounds of Edward III.'s claim to the French throne, and discuss its merits.

ETHNOLOGY.

1. Agassiz says: "The boundaries within which the different natural combinations of animals are known to be circumscribed upon the surface of our earth, coincide with the natural range of distinct types of man." What is implied in this theory? Discuss its value.

2. Herodotus calls the Dorians a Hellenic, and the Ionians a Pelasgian people. He also refers to the Æolians as Pelasgian. Discuss the ethnological deductions which this suggests, in connexion with the final adoption of the name Hellenes for the whole people of Greece; and define the bearings of the traditions relative to Cecrops, Cadmus, Danaus, and Pelops.

3. Classify ethnologically, with reasons: the Oscans, the Sabines, the Etruscans, the Carthaginians, the Basques, the Belgæ, the Spanish Moors, and the Majiars.

4. Trace the origin and development of the Romance languages; and discuss their bearing on the general question of the ethnical significance of philological evidence.

5. Seeing that Gaul and Britain were both occupied by Celtic nations when conquered by the Romans, and were subjected to similar influences by their conquerors: account for the fact that the former exchanged its Celtic for a Romance language, and the latter for a Germanic one.

6. Max Müller asks "What is grammar, after all, but declension and conjugation?" Define what is implied in this; and consider its significance in relation to the different theories of the origin of language.

7. Define the specific bearings of philological evidence on ethnological researches; and state in what respects physical and philological evidence supplement each other.

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

ENGLISH.

HONORS AND SCHOLARSHIPS.

Examiners: { D. WILSON, LL.D.
{ J. A. BOYD, M. A.

I. *Shakspeare's Henry IV., parts 1 and 2.*

(1.) What characters and circumstances connect these plays with Richard II. and Henry V.?

(2.) Note the anachronisms which occur in Henry IV., and give grounds of justification for Shakspeare's use of anachronisms.

(3.) What references to contemporary authors and literature does Shakspeare make in these dramas? What were his probable objects in these references?

(4.)
(1.) "The skipping king, he *ambled* up and down
(2.) With *shallow jesters*, and rash bavin *wits*,
(3.) Sooe kindled and sooe burned; *carded* his state;
(4.) Mingled his royalty with carping fools;
(5.) Had his great name *profaned* with their scorns;
(6.) And gave his *countenance*, against his *name*,
(7.) To laugh at gibing boys, and stand the *push*
(8.) Of every beardless, vain comparative;
(9.) Grew a *companion* to the common streets,
(10.) Enfeoffed himself to popularity;

(11.) That being daily swallowed by men's eyes,

(12.) They *surfeited* with honey; and began

(13.) To loathe the taste of sweetness, whereof a little

(14.) More than a little is by much too much."

<div align="right">1 *Hen. IV., Act* 1, *scene* 2.</div>

(*a.*) Point out and name all the figures, rhetorical and syntactical, in this passage.

(*b.*) Discuss the various readings proposed instead of " *bavin*," " *carping*," and " *carded*."

(*c.*) What is the meaning of " *comparative* "? Exemplify Shakspeare's use of the word by another passage from this play.

(*d.*) State accurately the force of the 6th, 7th, 8th, and 10th lines.

(*e.*) Give groups of synonyms for the words in *italics*, and distinguish between the shades of meaning of the words in each group.

(5.) In these plays occur the following words:— " *Younker*," " *mammets*," " *corrival*," " *kickshaws*," " *gossip*," " *curry*," (*i.e.*, curry favour.) Give the derivation and transmutations of meaning of each.

II. *Milton, Spencer, Pope and Cowper.*

(1.) Give an account of the origin and history of the English sonnet.

(2.) Detail the laws of the sonnet in its strictness; mention the modifications in form and matter which it received from Milton.

(3.) Shew in what manner the Spenserian stanza was compounded from earlier forms of verse; give the laws of the closing line, its name, and why so called.

(4.) State fully the advantages and disadvantages of this measure as used by Spenser; and also the influence which it had upon his language.

(5.) Analyse Pope's rhyming couplet with reference to its metrical character, and compare it with the same measure as used by Keats.

(6.) Contrast the influence of Pope and Cowper on English poetry. State briefly the benefits rendered by each to the cause of poetical literature.

(7.) " Concord she *cleeped* was in common *reed*.

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By her the heaven is in *his* course contained,
And all the world in state unmoved stands,
As their Almightie Maker first ordained,
And bound them with inviolable bands ;
Else would the waters overflow the lands
And fire devoure the ayre, and hell them quight,
But that she holds them with her blessed hands.
She is the nourse of pleasure and delight,
And unto Venus grace the gate doth open *right*.
By her I entring half dismayd was ;
But she in gentle *wise* me *entertayned*
And twixt her selfe and Love did let me pas ;
But Hatred would my entrance have restrayned,
And with his club me threatned to have brayned,
Had not the Ladie with her powrefull speach
Him from his wicked will *uneath* refrayned ;
And th'other *eke* his malice did *empeach*,
Till I was throughly past the perill of his reach.

Faerie Queene, B. 4, C. 10.

(*a.*) Indicate all the figures, rhetorical and syntactical, in this passage.

(*b.*) Give the derivation and signification of the words in *italics*.

(*c.*) " *Hell them quight.*" Give the various readings as to these words, and the changes of meaning resulting therefrom.

(*d.*) Point out any peculiarities in the prosody or rhythm.
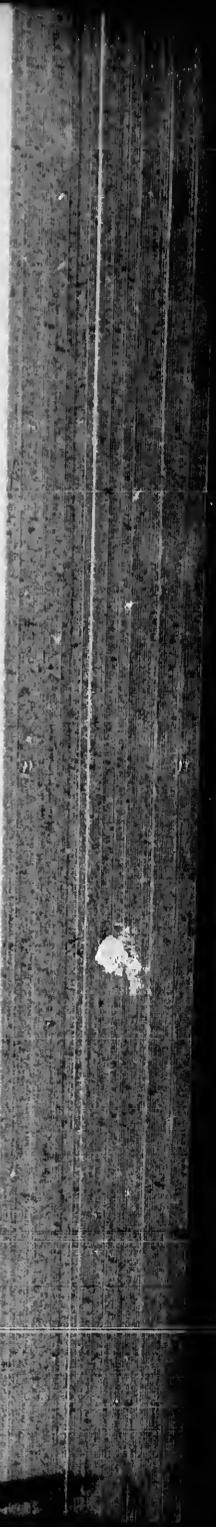
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ANNUAL EXAMINATIONS: 1864.

CANDIDATES, FOR B.A.

ENGLISH.

Examiners : ⎱ D. Wilson, LL.D.
　　　　　 ⎰ J. A. Boyd, M.A.

*** *Answers to all the questions are not indispensable ; but* FULL ANSWERS *are required to as many as can be overtaken within the time.*

"To begin, then, with Shakspeare. He was the man who, of all modern, and perhaps ancient poets, had the largest and most comprehensive soul. All the images of nature were still present to him, and he drew them not laboriously, but luckily. When he describes any thing, you more than see it, you feel it too. Those that accuse him to have wanted learning give him the greater commendation. He was naturally learned : he needed not the spectacles of books to read nature ; he looked inward and found her there. I cannot say he is every where alike ; were he so, I should do him injustice to compare him with the greatest of mankind. He is many times flat, insipid ; his comic wit degenerating into clinches, his serious swelling into bombast. But he is always great when some great occasion is presented to him ; no man can say he ever had a fit subject for his wits and did not raise himself as high above the rest of the poets." JOHN DRYDEN.

1. Give the derivation of all words of Latin and French origin in this sentence.

2. Point out all examples of obsolete structure, and reconstruct them according to present usage, with reasons.

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3. Point out all archaic terms, and words used in a different sense from their present value; and replace them by their modern equivalents.

4. What is implied in the fact that forms of construction, and uses of terms, which were correct in the 17th century are no longer admissible in English composition.

5. When the Romans conquered Gaul and Britain, the languages of both countries were Celtic; the result in France has been the substitution of a Neo-Latin or Romance language; whereas that of England is Germanic. Account for this.

6. Fowler says of the present tendencies of the English language : "The distinction between the subjunctive and the indicative mode, and that between the participle passive and the past tense, are likely to pass away." Explain and illustrate each.

7. Point out all the sources from which the Latin element has been introduced into the English language; and define the relative importance of each.

8. "The Saxon element is much more expressive than the Latin part of the language." (*Fowler.*) Assign reasons for adopting or rejecting this opinion.

5. "The English of the 9th century is one language, and the English of the 19th century another. They differ at least as much as the Italian differs from the German." (*Craik.*) Explain what is meant, and account for the fact.

10. Define the rank of Goldsmith as a poet and dramatist, in reference to his immediate predecessors, contemporaries, and successors.

11. Craik says, "In all that constitutes artistic character the poetry of Coleridge is a contrast to that of Wordsworth." Discuss the significance and accuracy of this criticism.

12. Define the terms *objective* and *subjective*, as applied to discriminate between Shakspeare and Byron.

Translate

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

FRENCH.

Examiners: { James Forneri, LL.D.
Robert Sullivan, A.M.

I.

1. Subject for French composition: "Humility rare in victory."

II.

Translate :

Le grand malheur de Frédéric fut de n'avoir point assez de respect pour la religion ni pour les mœurs. Ses goûts étaient cyniques. Bien que l'amour de la gloire ait donné de l'élévation à ses pensées, sa manière licencieuse de s'exprimer sur les objets les plus sacrés était cause que ses vertus mêmes n'inspiraient pas de confiance : on en jouissait, on les approuvait, mais on les croyait un calcul. Tout semblait devoir être de la politique dans Frédéric ; ainsi donc, ce qu'il faisait de bien rendait l'état du pays meilleur, mais ne perfection-nait pas la moralité de la nation. Il affichait l'incredu-dulité et se moquait de la vertu des femmes ; et rien ne s'accordait moins avec le caractère allemand que cette manière de penser. Frédéric, en affranchissant ses sujets de ce qu'il appelait les préjugés, éteignait en eux le patriotisme : car, pour s'attacher aux pays natu-rellement sombres et stériles, il faut qu'il y règne des

opinions et des principes d'une grande sévérité. Dans ces contrées sablonneuses, où la terre ne produit que des sapins et des bruyères, la force de l'homme consiste dans son âme ; et si vous lui ôtez ce qui fait la vie de cette âme, les sentiments religieux, il n'aura plus que du dégoût pour sa triste patrie.

MMME. DE STAEL, *De l'Allemagne.*

1. *Bien que.*   Give a synonym.

2. *On en jouissait.*   What does *en* refer to?

3. *Mais on les croyait.*   What is the antecedent of *les?* Give the force of *un calcul.*

4. *Tout semblait devoir.*   Turn *semblait* into an impersonal verb, and resolve *devoir* into tense and mood, with *tout* as subject.

5. *Etre de la politique.*   Give the force.

6. *Rendait meilleur.*   Turn it into a single word.

7. *En affranchissant.*   Resolve by a conjunction, tense and mood.

8. *Pour s'attacher.*   Make it definite.

III.

Translate:

CHIMÈNE.

Pour moi ! mon ennemi ! l'objet de ma colère !
L'auteur de mes malheurs ! l'assassin de mon père !
De ma juste poursuite on fait si peu de cas
Qu'on me croit obliger en ne m'écoutant pas !
Puisque vous refusez la justice à mes larmes,
Sire, permittez-moi de recourir aux armes ;
C'est par là seulement qu'il a su m'outrager,
Et c'est aussi par là que je me dois venger.
A tous vos cavaliers je demande sa tête ;
Oui, qu'un d'eux me l'apporte, et je suis sa conquête ;
Qu'ils le combattent, sire ; et, le combat fini,
J'épouse le vainqueur, si Rodrigue est puni.
Sous votre autorité souffrez qu'on le publie.

CORNEILLE, Act iv., Scene v.

1. *Pour moi ! mon ennemi !* Fill up the ellipsis, and connect this and following line with the preceding one.

2. *On fait si peu de cas.* Give the force.

3. *Qu'on me croit obliger.* What are this and preceding lines an answer to, and what the two *on* refer to?

4. *C'est par là.* Destroy the pleonasm in this and following verse, and give the force of *par là.*

5. *Si Rodrigue est puni.* When does the conjunction *si* govern the present, and when the future tense, and when is it turned into *que* with the subjunctive. Give an example for each case.

IV.

History of French literature, from the 18th century to the present time (Chouquet's.)

1. What work is considered the *master piece* of the French stage, and by whom was it written?

2. Name the founders of the *Biographie Universelle*, and give the character of the work.

3. What are the works which place F. Arago among the most distinguished literary men of our age?

4. Give a biographical sketch of E. Sue, and state what sort of romance he is the creator of.

5. To whom is France indebted for *Histoire de Dix ans*, and what is its character?

Translate :

Par…
fait le…
et la…
et la…
votre…
pour q…

Oua…
choses…

Tais…
pas à v…

Je ve…
feront r…
d'autre…
est un c…

University of Toronto.

CANDIDATES FOR B.A.

FRENCH.

HONORS AND SCHOLARSHIPS.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.

Translate into English:

JACQUELINE.

Par ma fi, monsieu, ceti-ci fera justement ce qu'ant fait les autres. Je pense que ce sera queussi queumi; et la meilleure médecaine que ce sera queussi queumi; et la meileure médecaine que l'an pourrait bailler à votre fille, ce serait, selon moi, un biau et bon mari, pour qui alle eût de l'amiquîé.

GERONTE.

Ouais! nourrice ma mie, vous vous mêlez de bien des choses!

LUCAS.

Taisez-vous, notre minagère Jacquelaine; ce n'est pas à vous à bouter là votre nez.

JACQUELINE.

Je vous dis et vous douze que tous ces médecins n'y feront rian que de l'iau claire; que votre fille a besoin d'autre chose que de rhibarbe et de séné, et qu'un mari est un emplâtre qui garit tous les maux des filles.

GERONTE.

Est-elle en état maintenant qu'on s'en voulût charger avec l'infirmité qu'elle a ? Et lorsque j'ai été dans le dessein de la marier, ne s'est-elle pas opposée à mes volontés ?

JACQUELINE.

Je le crois bian ; vous li vouliez bailler eun homme qu'alle n'aime point. Que ne preniais-vous ce monsieur Liandre, qui li touchait au cœur ? Alle aurait ete fort obéissante ; et je m'en vas gager qu'il la prendrait, li, comme alle est, si vous la li vouillais donner.

MOLIERE, *Le Medecin Malgré lui*, Act ii., Scene ii.

1. *Les autres.* Add the noun.

2. *Queussi queumi.* Give the force.

3. *Taisez-vous.* Compare *se taire, taire et faire taire.*

4. *Ce n' est pas à vous à bouter là votre nez.* Give the force of *à bouter là votre nez,* especially of *là.* State what difference between *c'est à vous de,* and *c'est à vous à.*

5. *N'y feront rian que de l'iau claire.* Give the force. What does *y* refer to ?

6. *Que ne preniais-vous, &c.* For what does *que* stand here ?

7. *Li, comme alle est.* Give the force.

8. Turn all incorrect words and expressions into good modern French.

II.

Translate into English :

Mais, pour punir enfin nos maîtres à leur tour
Dieu fit choix de Cyrus avant qu'il vit le jour,
L'appela par son nom, le promit à la terre,
Le fit naître, et soudain l'arma de son tonnerre,
Brisa les fiers remparts et les portes d'airain,
Mit des superbes rois la dépouille en sa main,
De son temple détruit vengea sur eux l'injure :
Babylone paya nos pleurs avec usure.
Cyrus, par lui vainqueur, publia ses bienfaits,
Regarda notre peuple avec des yeux de paix,
Nous rendit et nos lois et nos fêtes divines ;
Et le temple déja sortoit de ses ruines.

Mais, de ce roi si sage, héritier insensé,
Son fils interrompit l'ouvrage commencé,
Fut sourd à nos douleurs : Dieu rejeta sa race,
Le retrancha lui-méme et vous mit en sa place.

RACINE, *Esther*, Act iii., Scene iv.

1. *Nos maitres.* Name them.

2. *Dieu fit choix de Cyrus.* Explain the prophecy concerning Cyrus and name the prophet.

3. *Avant qu'il vit le jour.* Give the force or give a synonym.

4. *Le fit naître.* Explain the peculiarity of *faire* when followed by an infinitive without preposition, and compare *ne faire que* with *ne faire que de.*

5. *Babylone—avec usure.* Give the force *avec usure.*

6. *Son fils interrompit.* Who is he ?

7. *L'ouvrage commencé.* Name it.

8. Point out the two most striking inversions, and state what figure you perceive in the lines from " *Dieu fit choix de Cyrus*" up to *Cyrus, &c.*

POETRY O

Translate

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

FRENCH.
HONORS AND SCHOLARSHIPS.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M.A.

I.

POETRY OF THE TROUBADOURS AND TROUVÈRES COMPARED AND RENDERED INTO FRENCH PROSE.

Translate into modern French :

> Aquelles mans que james perdonaren
> Han ja romput lo fill tenint la vida
> De vos, qui son de aquest mon exida
> Segons los fats en secret ordenaren.
> Tot quant yo veig e sent dolor me torna
> Cant me recort de vos que tant amava.
> En ma dolor, si prim e bel cercava
> Si trobara que 'n delit se contorna.
> Donchs durara, puix té qui la sosting,
> Car sens delit dolor cresch nos reting.

> En cor gentil amor per mort no passa,
> Mas en aquell qui sol lo vici tira ;
> La quantitat d' amor durar no mira,
> La qualitat d' amor bona no s'lassa.
> Quant l' ull no veu e lo toch no pratica
> Mor lo voler que tot por el se guanya
> Qui 'n tal punt el dolor sent molt estranya
> Mas dura poch qui 'n passau testifica.
> Amor honest los sancts amant fa colre
> D' aquest vos am, et mort nol me pot tolre.

SISMONDI, *Langue d' Oc*, page 160.

1. *Aquelles mans, &c.* Whoso *mans?*

2. *Tenint.* Resolve it into a tense and mood.

3. *Segons los fats.* Fill up the ellipsis.

4. *Tot quant.* Resolve *quant.*

5. *Si trobara que 'n delit, &c.* Prefix the antecedent to *que.*

6. *Puix té.* Fill up the ellipsis.

7. *La sosting.* What does *la* refer to?

8. *Dolor cresch nos reting.* Resolve *cresch* and analyse *nos.*

9. *Mas en aquell qui.* Fill up the ellipsis.

10. *La quantitat 'd amor* .... *La qualitat, &c.* Explain the antithesis.

11. *No mira.* Prefix the subject.

12. *Por el.* What does *el* refer to?

13. *Qui.* Give the antecedent.

14. *Mas dura poch qui, &c.* What is the antecedent of *qui?*

15. *En passau testifica.* Give the force, as well as of *sancts amant fa colre.*

II.

Translate into modern French:

> Oimi amors si dure départie
> Me convendra faire de la moillor
> Qui oncques fust amée ne servie.
> Dex me ramoint à lut por sa douçor
> Si voirement que j'en part à dolor.
> Dex! qu'ai-ja dit, je ne m'en part je mie;
> Se li cors va servir notre seignor,
> Tout li miens cuers remaint en sa baillie.

<div align="right">

Sismondi, *Langue d' Oil*, page 209.
</div>

1. *Me convendra faire.* Prefix the subject. Give a synonym of *convendra;* suppress *me,* and resolve *faire* into a tense and mood.

2. *Dex me raimoint à lut.* Fill up the ellipsis, and give the antecedent of *lut*.

3. *Que j'en part à dolor.* What does *en* refer to?

4. *Qu'ai-ja dit?* Introduce a pleonasm.

6. Point out all the words which have passed unaltered from the *Langue d' Oc* into any of the modern tongues, and all those which have passed from the *Langue d' Oil* into modern French without any modifications.

7. Name all words, or expressions, which under the same spelling bear a different meaning in any of the modern languages.

8. Translate into modern French:

Tenint, segons, puix, cresch, ull.—(Langue d' Oc.)
Moillor, oncques, lut, and *cuers.—(Langue d' Oil.)*

9. To what class of composition do the two stanzas above belong; what inspired them; and who are the authors?

III.

ORIGIN AND FORMATION OF THE ROMANCE LANGUAGES,
(BY SIR G. CORNWALL LEWIS.)

1. How many conjugations has the Provençal language; how do they terminate; and how many auxiliary verbs? Name them all.

2. Give the *present participle* and *the gerund* of each *auxiliary*.

3. How did the Provençal use its *gerund?*

4. From what word is derived *que* in conjunction with verbs?

5. Name two words in each language, Italian, Spanish, and French, derived from the Teutonic.

6. What sense did *ab* and *a* take in the Provençal?

7. What number did the Provençal use after a noun of multitude?

8. How did the Provençal form the degrees of comparison?

Within tw

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CANDIDATES FOR B.A.

GERMAN.

Examiners: $\left\{\begin{array}{l}\text{James Forneri, LL.D.}\\ \text{Robert Sullivan, M-A.}\end{array}\right.$

I.

SUBJECT FOR GERMAN COMPOSITION.

"Character of the Ass."

Within twenty lines at least.

II.

Translate :

Eine Stiftung neuer Art und eigener Gattung ist diese spanische Inquisition, die im ganzen Laufe der Zeiten kein Vorbild findet, und mit keinem geistlichen, keinem weltlichen, Tribunal zu vergleichen steht. Inquisition hat es gegeben, seitdem die Vernunft sich an das Heilige wagte, seitdem es Zweifler und Neuerer gab; aber erst um die Mitte des dreizehnten Jahrhunderts, nachdem einige Beispiele der Abtrünnigkeit die Hierarchie aufgeschreft hatten, baute ihr Innocentius der Dritte einen eigenen Richterstuhl, und trennte auf eine unnatürliche Weise die geistliche Aufsicht und Unterweisung von der strafenden Gewalt. Um desto sicherer zu seyn, daß kein Menschengefühl und keine Bestechung der Natur die starre Strenge ihrer Statuten auflöse, entzog er sie den Bischöfen und der säcularischen Geistlichkeit, die durch die Bande des bürgerlichen Lebens noch zu sehr an der Menschheit hing, um sie Mönchen zu übertragen, einer Abart des menschlichen Namens, die die heiligen Triebe der Natur abgeschworen, dienstbaren Kreaturen des römischen Stuhls.

SCHILLER GESCHICHTE DES ABFALLS.

1. *Eine Stiftung, &c.* Give to this compound sentence a regular construction, fill the ellipsis and explain the rule of *zu vergleichen steht*, giving a synonym to *steht*.

2. *Zu vergleichen steht.* Turn *vergleichen*, into an attributive adjective.

3. *An das heilige.* Turn it into a relative sentence.

4. *Es . . . gab.* What sort of verb, and what case does it govern?

5. *Die Hierarchie.* Name it.

6. *Baute ihr.* What does *ihr* refer to?

7. *Unnatürlich Weise.* When is the adverbial idea to be expressed by the substantive *Weise* and the adjective in the form of the genitive? Give an example.

8. *Um desto scherer zu seyn.* Give a synonym of *desto*, and state when *je* can be used instead of *desto*. Give an example.

9. *Entzog er sie.* Give the antecedents of *er* and *sie*.

10. *Den Bischöfen ...... Um sie Mönchen übertragen.* Explain the rule of these dative cases.

11. *Dienstbaren Kreaturen, &c.* With what does it stand in apposition?

III.

Translate :

Parricida.

O Rudolph! Rudolph! Königlicher Ahn!
So zieht dein Enkel ein auf deines Reiches Boden!

Tell.

So immer steigend kommt Ihr auf die Höhen
Des Gotthardts, wo die ew'gen Seen sind,
Die von des Himmels Strömen selbst sich füllen.
Dort nehmt Ihr Abschied von der deutschen Erde,
Und muntern Laufs führt Euch ein andrer Strom
Ins Land Italien hinab, Euch das gelobte.

SCHILLER'S *Wilhelm Tell.*

1. *So zieht......so immer, &c.* Give the force of both these *so*.

2. *Die ew'gen Seen.* What are they?

3. *Von des himmels Strömen.* Give the force.

4. *Dort.* Where.

5. *Muntern Laufs......Ins Land Italien.* Explain the rules applicable to these two expressions.

6. *Gelobte.* What does it qualify? Turn it into a relative sentence.

IV.

German Literature, 7th period, (Gostick's.)

1. Which of Schiller's Dramas won for the poet universal reputation in his native land; and which of his plays was the most popular?

2. Into how many classes can the prose fictions of the Germans be arranged? Name them.

3. In what class do you fix Goete's Wilhelm Meister's and Wagner's novels?

4. In what class is German literature particularly rich; and in what is it comparatively poor?

5. What writings led to the conclusion: " *There is nothing in the understanding which has not arrived there through the senses* "? and what did Leibnitz reply to that conclusion?

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GERMAN.

HONORS AND SCHOLARSHIPS.

Examiners: { JAMES FORNERI, LL.D.
{ ROBERT SULLIVAN, M. A.

I.

Translate :

Elisabeth.

Wo sind die andern Lords?

Davison.

     Sie sind gegangen,
Das aufgebrachte Volk zur Ruh zu bringen.
Das Toben war auch augenblicks gestillt,
Sobald der Graf von Shrewsbury sich zeigte.
„Der ist's! Das ist er!" reisen hundert Stimmen,
„Der rettete die Königin! Hört ihn,
„Den bravsten Mann in England!" Nun begann
Der edle Talbot und verwies dem Volk
In sanften Worten sein gewaltsames
Beginnen, sprach so kraftvoll überzeugend,
Daß Alles sich besänftigte und still
Vom Platze schlich.

   SCHILLER, *Maria Stuart*, Act iv., Scene xi.

1. *Die andern Lords.* Why *Lords* spelt with a final *s*?

2. *Zur Ruh zu bringen.* Compress the phrase into a single word.

3. *Aufgebrachte Volk.* Turn *aufgebrachte* into a relative sentence.

4. *Augenblicks.* What does the genitive express, and explain to what it owes its origin?

5. *Sobald.* Fill up the ellipsis.

6. *Der ist es! Das ist er.* Explain the peculiarities of *es* and *das.*

7. *Der rettete.* What is the antecedent of *der?*

8. *Nun begann.* Give the difference between *nun* and *jetzt.*

9. *So kraftvoll überzeugend.* Resolve *überzeugend* by a conjunction, and place it after *dasz.*

10. *Alles,* &c. What does *alles* express here? Give its peculiarities.

II.

Translate :

In dem blut'gen Thal der Thermopylen,
Wo der Griechen freie Schaaren fielen,
Grub in Marmor ihrer Brüder Dank:
„Wand'rer! sag's den kinderlosen Eltern,
Daß für's Vaterland auf diesen Feldern
„Sparta's kühne Heldenjugend sank!" —
Und Jahrtausende sind Staub geworden,
Jenes Marmors heil'ge Säule brach;
Doch in triumphirenden Accorden
Riefen's die Jahrhunderte sich nach.

Und erzählten, trotz dem Sturmgetöse
Ihrer Zeit, von der Heroen=Größe
Der Gefall'nen und von Sparta's Dank. —
Groß war Griechenland durch seine Helden,
Aber größer noch durch sein Vergelten,
Wenn der Bürger für die Freiheit sank.
Jenseit lohnt ein Gott mit ew'gen Strahlen,
Doch das Leben will auch seinen Glanz.
Nur mit Ird'schem kann die Erde zahlen,
Und der Oelzweig windet sich zum Kranz.

KÖRNER, *Epische Fragmente,* &c., page 281.

1. *In dem blut'gen Thal der Thermopylen,* &c. Give short notes of this event.

2. *Grub in Marmor.* Give the subject.

3. *Kühne Heldenjugend.* What number do collective substantives govern the verb in; and what the pronouns referring to them?

4. *Iahrtausende sind,* &c. Paraphrase this line, and state why *sind* and not *ist.*

5. *Riefen's.* What does *es* refer to?

6. *Sich.* Is it reflective or reciprocal? State the use of *einander.*

7. *Und erzählten.* Prefix the subject.

8. *Ihrer Zeit.* What does *ihrer* refer to?

9. *Durch seine Helden.* Compare *durch* with *von.*

10. *Aber grösser noch.* Fill up the ellipsis.

11. *Ienseit.* Give the force.

12. *Will auch.* Add the verb.

13. *Nur mit Ird'schem.* Turn it into a relative sentence.

14 *Und der Oelzweig,* &c. Turn *und* into *namely,* and the remainder of the line into an attributive adjective, governed by *mit.*

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

ITALIAN.

Examiners: } JAMES FORNERI, LL.D.
Robert Sullivan, M.A.

I.

Translate into Italian:

Zeusi entered into a contest of art with Parrasius. The former painted grapes so truly that birds came and pecked at them. The latter delineated a curtain so exactly that Zeusi coming, said: "Take away the curtain that we may see this piece." And finding his error, said: "Parrasius, thou hast conquered; I only deceived birds, thou an artist.

II.

Translate into English:

E 'l Duca disse a me: Più non si desta
    Di quà dal suon dell' angelica tromba.
    Quando verrà la nimica podesta,
Ciascun ritroverà la trista tomba,
    Ripiglierà sua carne e sua figura,
    Udirá quel che in eterno rimbomba.
Si trapassammo per sozza mistura
    Dell' ombre e della pioggia, a passi lenti,
    Toccando un poco la vita futura:
Perch' io dissi: Maestro, esti tormenti
    Crescerann' ei dopo la gran sentenza,
    O fien minori, o saran si cocenti?

Ed egli a me : Ritorna a tua scienza,
  Che vuol quanto la cosa e più perfetta,
  Più senta 'l bene, e cosi la doglienza.
Tuttoche questa gente maledetta
  In vera perfezion giammai non vada,
  Di là più che di quà, essere aspetta.
Noi aggirammo a tondo quella strada,
  Parlando più assai ch' i' non ridico :
  Venimmo al punto dove si digrada :
Quivi trovammo Pluto il gran nemico.

      DANTE, *Inferno,* Canto vi.

1. *Più non si desta.*   Give the force.

2. *Di quà dal suon, &c.*   Paraphrase especially *angelica tromba.*

3. *Nimica podesta.*   What is it ?

4. *Quel che in eterno rimbomba.*   What is it ?

5. *Toccando un poco.*   Explain.

6. *Dopo la gran sentenza.*   Define it.

7. *Fien.*   From what Latin verb is it derived ?   What tense is it, and for what does it stand here ?

8. *Si cocenti.*   Give the second term of comparison.

9. *A tua scienza.*   Name it.

10. *Di là, diquà.*   Add the complement and give the full force of this line.

11. *A tondo.*   Explain.

12. *Più assai ch' i' non ridico.*   What language is this form of comparison common to ?

13. *Si digrada.*   Give the force.

14. *Pluto il gran nemico.*   Who is Pluto according to poets ?

15. *Il gran nemico.*   Of whom or what ?

III.

Translate into English :

LXX.

  Come l' alma gentile uscita ei vede,
  Rallenta qnel vigor ch' avea raccolto,

E l' imperio di sè libero cede
Al duol già fatto impetuoso e stolto,
Ch' al cor si stringe, e chiusa in breve sede
La vita, empie di morte i sensi e'l volto.
Già simile all' estimo il vivo langue
Al colore, al silenzio, agli atti, al sangue.

LXXI.

E ben la vita sua, sdegnosa e schiva,
Spezzando a forza il suo ritegno frale,
La bella anima sciolta alfin seguiva,
Che poco innanzi a lei spiegava l' ale.
Ma quivi stuol de' Franchi a caso arriva,
Cui trae bisogno d' acqua o d' altro tale,
E con la donna, il Cavalier ne porta
In sè mal vivo, e morto in lei ch' è morta.

LXXII.

Però che 'l Duce loro ancor discosto
Conosce all' arme il Principe Cristiano;
Onde v' accorre; e poi ravvisa tosto
La vaga estinta, e duolsi al caso strano.
E già lasciar non vuole ai lupi esposto
Il bel corpo che stima ancor Pagano;
Ma sovra l' altrui braccia ambi li pone,
E ne vien di Tancredi al padiglione.

LXXIII.

Affatto ancor nel piano e lento moto
Non si risente il Cavalier ferito;
Pur fievolmente geme, e quinci è noto
Che 'l suo corso vital non è finito:
Ma l' altro corpo tacito ed immoto
Dimostra ben che n' è lo spirto uscito.
Così portati, e l' uno e l' altro appresso,
Ma in differente stanza, alfine è messo.

TASSO, *Gerusalemme Liberata.*

1. Set these four stanzas into regular construction, and then translate them into English.

2. *Al duol già fatto, &c.* Form a relative sentence.

3. *E chiusa in breve sede, &c.* Fill up the ellipsis before *chiusa.*

4. *Empie di morte.* Prefix the subject.

5. *Già simile al' estinto.* Paraphrase this line.

6. *La bella anima sciolta.* Name it, and state why *sciolta?*

7. *Alfin seguiva.* What figure do you perceive in *seguiva?*

8. *A lei.* Give the word referred to.

9. *Ne porta.* Give the force of *ne.*

10. *In sè mal vivo e morto, &c.* Explain the meaning of this line.

11. *L'Altrui braccia.* Give the force.

IV.

HISTORY OF ITALIAN LITERATURE. (Sismondi's.)

1. What heroic poems did Boccaccio leave, and what influence had they over the future poetry of Italy, Spain, and Portugal?

2. Why did he object to the *terza rima* of Dante?

3. Give the character of the 15th century with respect to Italian literature.

4. Name some of the men who flourished in the 15th century, and to whom we owe the revival of Greek and Latin literature.

5. Give a short biographical sketch of Francesco Filelfo; state what he left behind, and how he contributed especially to the progress of literature.

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

SPANISH.

Examiners: { James Forneri, LL.D.
{ Robert Sullivan, M.A.

I.

GRAMMATICAL QUESTIONS.

1. When is the participle past *muerto* declined, and when not?

2. Translate: *Thy brother came very near falling. I came very near writing to thee this morning.*

3. What verb is employed in Spanish to express a repetition, and what to express, *I have just done a thing?*

4. When is the participle past, constructed with the verb *tener*, to be declined and when not?

5. Translate: *What o'clock is it? One o'clock. Seven o'clock is about striking.*

6. *A brother of his, a friend of mine.*

7. With what word does *cuyo* agree. Translate: *Whose pens are these?*

II.

Translate into Spanish:

A man had two sons, one of whom liked to sleep very late in the morning, and the other was industrious, and always rose very early. The latter having one day gone out very early, found a purse well filled with

money. He ran to his brother to inform him of his good luck, and said to him : " See, Lewis, what is got by rising early?" "Faith!" answered his brother, "if the person to whom it belongs had not risen earlier than I, he would not have lost it."

III.

Translate:

Pero mientras los dos arabales, por su reduccion y el buen trato del vencedor con ellos, gozaban de la mayor abundancia, la ciudad, al contrario, se veía reducida al mayor estrecho por la falta de todas las cosas necesarias á la vida. Constreñidos al fin por la necesidad sus moradores, ofrecieron echar á los almoravides de allí y entregarse á Rodrigo, si dentro de cierto tiempo no les venian socorres del Africa. Con estas condiciones consiguieron treguas por dos meses, en cuyo término partió el Cid á hacer algunas correrías en los contornos de Pinnacatel, donde encerró todo el botin que habia cogido, y despues pasó á las tierras del señor de Albarracin, y las estragó todas en castigo de habérsele rebelado aquel moro.

QUINTANA, *Vida del Cid.*, p. 12.

1. *Por su reduccion.* What does *su* refer to ? Compare *por* with *para*.

2. *De la mayor, &c.* Give a synonym.

3. *Se veía reducida.* Turn it into a passive verb.

4. *Constreñidos al fin.* Fill up the ellipsis.

5. *De alli.* Suppress and give the equivalent.

6. *En cuyo término.* Give the peculiarity of *cuyo*.

7. *Algunas correrías* When is *uno* or *alguno* to be expressed, and when not ?

8. *Habérsele rebelado, &c.* Analyse *habérsele*, and translate it literally. Give the three constructions of *se*.

IV.

Translate:

DOÑA IRENE. Con qué, Senor D. Diego ¿es ya la de vamonos? ...Buenos dias...(*Apaga la luz que está sobre la mesa.*) ¿Reza usted ?

D. Diego. Sí para rezar estoy ahora. (*Paseán-dose con inquietud.*)

Doña Irene Si usted quiere, ya pueden ir disponiendo el chocolate, y que avisen al Mayoral para que enganchen luego que...¿Pero qué tiene usted, Senor? ...Hay alguna novedad?

D. Diego. Sí, no deja de haber novedades.

Doña Irene. Pues qué...Dígalo usted por Dios... ¡Vaya, Vaya!....No sabe usted lo asustada que estoy... Cualquiera cosa, así, repentina, me remueve toda y me ...Desde el último mal parto que tuve quedé tan súmamente delicada de los nervios...Y va ya para diez y nueve años, si no son veinte; pero desde entónces, ya digo, cualquiera friolera me trastorna...Ni los baños, ni caldos de culebra, ni la conserva de tamarindos: nada me ha servido, de manera que...

D. Diego. Vamos, ahora no hablemos de malos partos ni de conservas... Hay otra cosa mas importante de que tratar...¿Qué hacen esas muchachas?

MORATIN, *El sí de las Niñas*, Act iii., Scene xi.

1. *Es ya la de vámonos.* Fill up the ellipsis, and give the force of the whole.

2. *Sí, para rezar estoy ahora.* In what spirit does he speak this? Why not *soy* instead of *estoy*.

3. *Ya pueden ir, &c.* What is the subject of *pueden*?

4. *Y que avisen.* Fill up the ellipsis.

5. *Luego qué...* Add the complement.

6. *Que tiene usted. Hay alguna novedad?* Translate into French.

7. *Sí, no deja de haber, &c.* Give the force.

8. *Y va ya para diez y nueve años.* Give the force.

9. *Nada me ha servido.* When is *nada* affirmative?

10. *De que tratar.* Fill up the ellipsis.

11. Point out the most striking peculiarity or peculiarities not common to other modern languages.

V.

HISTORY OF SPANISH LITERATURE (Sismondi's.)

1. Characterise the style of Cervantes in his Don Quixote, and name some of his best novels.

2. Into how many periods may the life of the Cid be divided? State them, and specify the contents of each period. Give a short biographical sketch of Mendoza, and name some of his best prose compositions.

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CANDIDATES FOR B.A.

ANALYTICAL CHEMISTRY.

Examiner: HENRY CROFT, D.C.L.

1. Give the methods of detecting sulphur and sulphurous acid.

2. Give the methods of detecting sulphuric acid and a base, in sulphates insoluble in water and acids.

3. Give the blowpipe tests for manganese, iron, copper, cobalt and chromium.

4. How may arsenical spots or rings be distinguished from those caused by antimony?

5. Analyse a mixture of potassa, soda and ammonia salts.

6. Give the tests for distinguishing baryta, strontia, lime and magnesia salts.

7. How may meconates, sulphocyanates and acetates be distinguished?

8. How may the value of binoxide of manganese be determined?

9. How may sulphuric acid be freed from arsenic without diluting.

10. What adulterations may occur in iodide of potassium? How do they arise? How detected?

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CANDIDATES FOR B.A.

GENERAL CHEMISTRY.

Examiner: HENRY CROFT, D.C.L.,

1. What is meant by dyalisis?

2. Give instances of the diffusion of gases, and the law of the rapidity of diffusion.

3. Classify the non-metallic elements (and analogous metals) according to their atomicity, and mention compounds either organic or inorganic, proving the same.

4. How may nitric acid and ammonia be produced without the aid of their salts?

5. What law is apparent in the boiling points of homologous series? Give several instances of these series.

6. How is the specific gravity of vapours determined?

7. What connection is there between the specific gravity of the vapour of a compound and its molecular weight?

8. What is the difference between an atom and a molecule? What is the active molecule of chlorine?

9. Give reasons for doubling the old equivalents of carbon, oxygen, and the molecule of cyanogen.

10. A hydrocarbon contains 85.71 C., 14.29 H.; a compound can be obtained from it containing 47.06 C., 46.40, Cl., 6.54 H., required its formula. How is the hydrocarbon obtained?

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ORGANIC CHEMISTRY.

Examiner: HENRY CROFT, D.C.L.

1. How may an organic compound be analysed qualitatively?

2. What is meant by rests or residues, and how do they differ from the old compound radicals?

3. Show how the following bodies may be produced from inorganic materials: formic acid, alchohol, glycerine, and oil of mustard.

4. How is hydrocyanic acid related to formic acid, and cyanogen to oxalic acid?

5. What is the present idea with regard to the composition of fulminic acid?

6. Represent a tribasic acid typically, and give the different series of salts and ethers which it forms.

7. Give the methods of forming the compound ethers, how decomposed by potassa, and how acted on by ammonia.

8. Give the homologues of ethylene, how acted on by chlorine, what atomicity have they when acting as residues.

9. What are double ethers, how formed?

10. From what substances can caffeine be obtained? What relation between it and theobromine?

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METEOROLOGY.

Examiner: G. T. KINGSTON, M.A.

1. State a remarkable exception to the law that bodies contract with a diminution of heat, and explain the beneficial consequences that result from this exception.

2. Define the terms "*specific heat*" and "*latent heat;*" and determine the weight of ice at temperature 16° that must be mixed with 1lb. of water at temperature 50° in order that the result may be ice at 32°, the specific heat of ice being 0·5 and the latent heat of liquefaction 142.

3. Explain the manner in which heat, rendered latent in the formation of vapour, tends to equalize the temperatures of localities that are differently circumstanced with respect to the action of the sun.

4. Describe the barometer: name the corrections to be applied to its readings, and state in each case whether the corrections are additive or subtractive, as well as the circumstances which determine their increase or diminution.

5. Define the terms *annual variation* and *diurnal variation*. State also the nature and explain the cause of the change in the amplitude of the diurnal variations of temperature in the different seasons.

6. Define the terms "*pressure of vapour*," and "*relative humidity*," and describe the process of deducing these quantities from the readings of the dry and wet thermometers.

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7. If the temperature of the air and the pressure of the vapour be known, shew how the depression of the dew point may be obtained.

8. Given the total pressure, as shewn by the barometer, and the pressure of vapour, find the so called pressure of dry air.

9. Explain the utility of a series of hourly observations of temperature at a central station, in its relation to observations at the same and at other stations taken less frequently than at every hour.

10. Explain also the utility of temperature observations continued for a long series of years at some one station, in their bearing upon shorter series made in other localities.

11. Describe and account for the monsoons in the Indian seas.

12. Enunciate and explain Dove's law relative to the rotation of the wind.

13. Give the meaning of the following terms: "*Monthly and annual isothermal lines,*" "*monthly normal temperature of a parallel of latitude,*" "*thermic anomaly,*" and "*thermic normals.*"

14. Investigate a formula for computing the resultant direction of the wind for any space of time, when the actual directions of the wind during that time are given, as well as the number of miles travelled in each direction.

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GEOLOGY AND PHYSICAL GEOGRAPHY.

Examiner : T. STERRY HUNT, M.A., F.R.S.

1. What characters distinguish igneous from sedimentary rocks, and what rocks occur both stratified and intrusive?

2. Describe the geography of North America during the coal period.

3. Mention some of the principal plants of the carboniferous period.

4. To what geological systems do the Llandeilo, Wenlock, Oriskany, and Trenton rocks belong, and what is the distribution of the latter?

5. What do you understand by greenstone, and what are its geological relations?

6. Describe the Laurentian series; its chief rocks and minerals.

7. Describe the copper deposits of Lake Superior, and the theory of their formation.

8. Describe the drift of North America, and the theory of its origin.

9. How are volcanic mountains formed, and what laws seem to govern their distribution?

10. What facts fix the age of the Laurentides, and of the White Mountains?

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MINERALOGY.

Examiner : T. STERRY HUNT, M.A., F.R.S.

1. Describe what is meant by hemitropism in crystals, and give samples from monometric and triclinic forms.

2. Give the general chemical formula of orthoclase and albite, and explain the relations between the latter and other triclinic feldspars.

3. Explain the production of kaolin from feldspar, and state what becomes of the separated elements.

4. What native compounds of iron are magnetic? Give their hardness, gravity, and color.

5. State the mineralogical characters of tinstone, and its geological relations.

6. How is gold found in nature, and by what processes is it obtained?

7. What are the principal vein-stones of the ores of lead and their composition?

8. Give the theory of the blow-pipe, and the manner of oxydizing and reducing by it.

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MINERALOGY AND GEOLOGY.
HONORS AND SCHOLARSHIPS.

Examiner : T. STERRY HUNT, M.A., F.R.S.

1. What silicious minerals contain a large proportion of magnesia ?   Give their hardness, density, and composition.

2. Describe the micas, and enumerate the principal species of the mica group.

3. Describe the occurrence, association, and probable origin of deposits of gypsum.

4. Explain the theory of metallic deposits, both in beds and in veins.

5. Describe the principal groups of mineral springs in Canada.

6. Describe the Quebec group, and its relation to the other Lower Silurian rocks.

7. Explain jointing, slaty cleavage, and foliation, with the causes to which they are attributed.

8. Explain the structure of synclinals and anticlinals, and their relations to hills and valleys.

9. Into how many classes may mountains be divided, and how are volcanic cones and trappean mountains formed ?
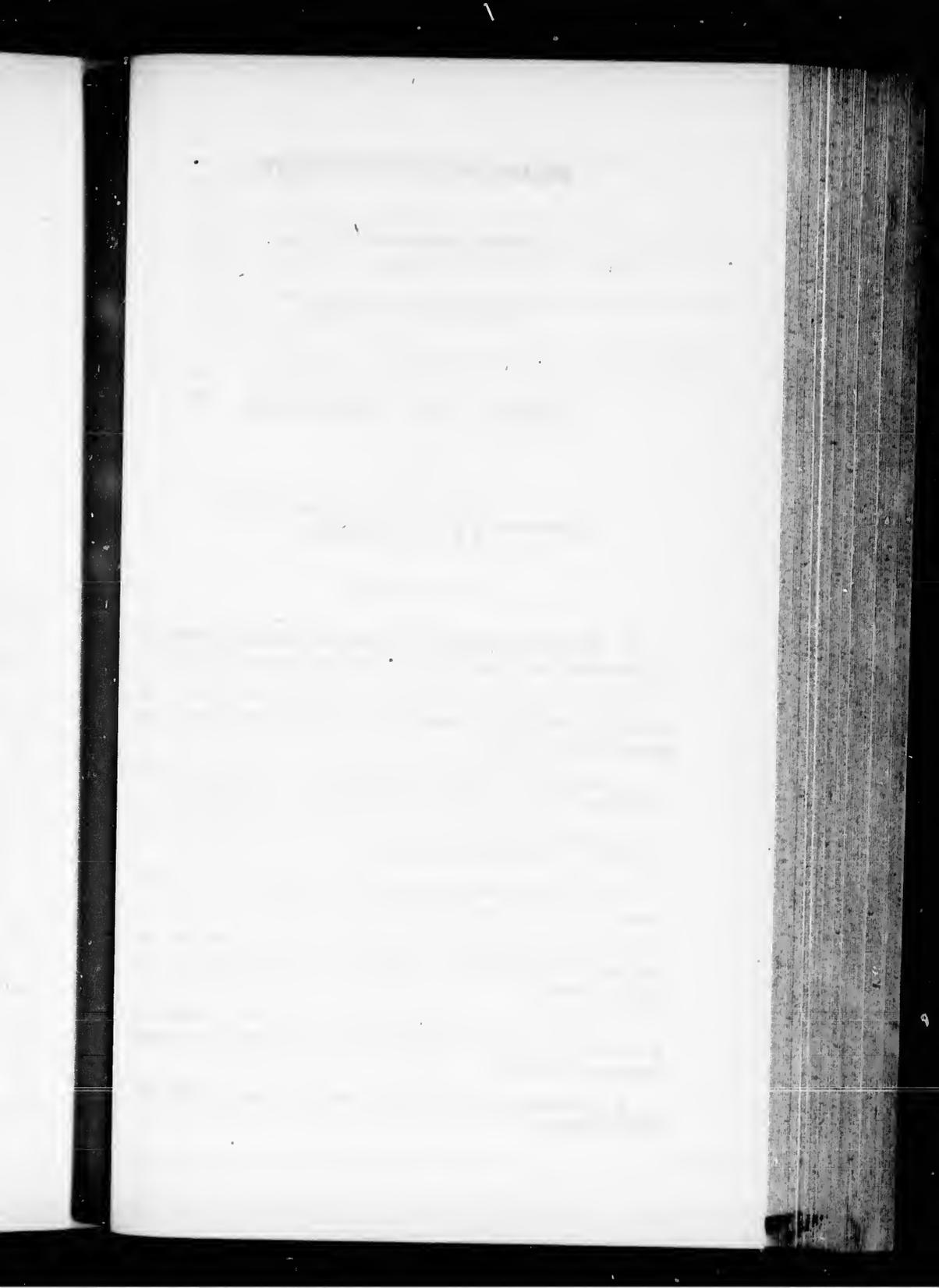
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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR B.A.

BOTANY AND HISTOLOGY.

Examiners: { REV. PROF. HINCKS, F.L.S.
T. J. COTTLE, ESQ.

1. The Amomal alliance—its common character—analysis of its orders, with an account of their properties and uses.

2. Sub-kingdom Dicotyledoneæ, class Gymnogenæ: explain the structural characters of the class, and give some account of the orders.

3. Analysis of the Urtical alliance, noticing its more important orders, with their distinctions and properties.

4. Order Simarubaceæ—its position and characters—its properties. Notice of the Cedron.

5. Daphnal alliance—its position. Analysis of its orders, orders, with an account of their properties.

6. Order Apocynaceæ—its position and properties: examples of familiar and beautiful plants belonging to it. Native example.

7. What are the meaning, objects and present position of the science of Histology, with its connection with other important sciences?

8. Give some account of the rotation of fluids within the cells of plants.

9. The different microscopical appearance of flax, cotton, wool and silk.

10. Sclerogenous deposits in vegetable cells; general mode of deposit; parts of plants in which such deposits are most remarkable; examples of peculiar appearances.

11. Structure of bone—its microscopical appearances, and their chief varieties.

12. Pedicellariæ of Echinodermata—their peculiar appearance—curious error respecting their nature—their supposed use.

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CANDIDATES FOR B.A.

COMPARATIVE PHYSIOLOGY.

Examiners: { REV. PROF. HINCKS, F.L.S.
T. J. COTTLE, ESQ.

1. What are the principal differences in the mode of viewing the phenomena presented by the animated creation, in order to derive from them general scientific laws ?

2. Principle respecting the mode of providing for the different habits of minor groups under a common type, which accounts for the peculiar development or occasional reduction to a merely rudimentary state of parts belonging to the common type.

3. State the reason why a provision for exhalation of aqueous fluid from the surface of organised beings is necessary, and give some account of the means by which it is accomplished in the animal kingdom.

4. Food—its varieties, and the circumstances upon which its value depends. Adaptation of the structure of different animals to the kind of food they are destined to consume.

5. Give the known particulars respecting the evolution of light and heat in the vegetable kingdom.

6. Structure of the brain in vertebrata—state the separate parts found in the brain, and the differences of their comparative development in the different divisions.

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FOURTH YEAR.

POLITICAL ECONOMY.

Examiner: Rev. James Beaven, D.D.

SMITH'S WEALTH OF NATIONS.

1. *a.* In the ordinary state of agriculture, what else, besides the wages of labour, has to be provided for out of the produce of labour?

   b. "This great apparent profit, however, is frequently no more than the reasonable wages of labour."

   Explain and illustrate, and state the portion of the subject in which it stands.

2. *a.* Which of the products of land always affords rent?

   b. Give examples of products which sometimes do and sometimes do not afford rent, and shew the causes of the difference.

   c. State the causes of the different money value of corn at different periods; and connect this with the variations in the value of silver.

3. State and exemplify the difference between productive and unproductive labour. Point out the connexion between capital and either of these, and its relation to industry and parsimony respectively.

4. Shew the object of restraints upon the importation of such goods as can be produced at home, and discuss the expediency of such restraints.

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5. "But the political institutions of the English colonies have been more favourable to the improvement and cultivation of this land (North America) than those of any of the other nations."

Explain this passage and state what point it is intended to illustrate.

6. "The works constructed by the ancient sovereigns of Egypt, for the proper distribution of the waters of the Nile, were famous in antiquity, and the ruined remains of some of them are still the admiration of travellers."

What subject is illustrated by this paragraph, and how?

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CANDIDATES FOR B.A.

METAPHYSICS AND ETHICS.
HONORS AND SCHOLARSHIPS.

Examiner: REV. PROFESSOR MURRAY.

1.   *a.*   Of what larger work was the Novum Organon intended to form a part?

    b.   What was the end which that larger work had in view?

    c.   Explain the relation of the Novum Organon to the other parts of the work.

2.   *a.*   Into how many parts is the Novum Organon divided? State the subject of each part.

    b.   In what form are both parts written?

3. Explain (*a*) the method which Bacon considered the great obstacle to the advancement of science, and (*b*) the method which he proposed to substitute in its place.

4.   *a.*   What does Bacon understand by *idola?*

    b.   How many kinds of idola does he enumerate?

    c.   Explain each kind.

5. State which kind of idola is referred to in each of the following quotations:

    a.   "That our language (when we speak of a *chain* of causes and effects) is merely analogical, must, I think, be admitted by every person who has taken the trouble to reflect on the subject; and yet it is certain that it has misled the greater part of philosophers." (*D. Stewart.*)

b. "In our reason there exist fundamental rules of its exercise, which have completely the appearance of objective principles. Now from this cause it happens, that the subjective necessity of a certain connection of our conceptions is regarded as an objective necessity of the determination of things in themselves." (*Kant.*)

c. "Musicians think our souls are harmonies,
　　Physicians hold that they complexions be;
Epicures make them swarms of atomies,
　　Which do by chance into our bodies flee."
(*Sir J. Davies.*)

6. State the four rules which characterise the method of Descartes.

7. Point out the conclusiveness of the enthymeme, *cogito, ergo sum*; and explain the position which it holds in the system of Descartes.

8. a. State Hamilton's distinction between *sensation proper* and *perception proper*, indicating any difference in this respect between his doctrine of perception and Reid's.

b. Explain Hamilton's division of the qualities of matter, pointing out its peculiarity and its relation to his distinction between sensation and perception.

9. "Memory is an *immediate* knowledge of the past," says Reid.

a. State generally Hamilton's distinction between *mediate* and *immediate* knowledge, and the objection, which he founds upon it, to Reid's account of memory.

b. Explain the bearing of this account of memory on Reid's own theory of immediate perception.

10. State Hamilton's distribution of the various theories with regard to perception, explaining the names by which he designates the system of philosophy founded upon these.

METAPHYSICS AND ETHICS.

HONORS.

Examiner: REV. JAMES BEAVEN, D.D.

TENNEMANN AND MORELL.

1. Give from Tennemann and Morell several definitions of philosophy, and show to which of them Aristotle most nearly approximated. To which does Morell incline?

2. What place did philosophy hold in the system of thought of the Christian Fathers?

3. Connect Leibnitz with previous philosophy, showing how it contributed to form his mind. Show his divergencies from it. Point out his leading principles, and connect his line of thought with subsequent German philosophy.

4. Point out and exemplify the differences between theological and philosophical scepticism.

5. Why cannot phrenology serve as the basis of a system of psychology? Who has attempted to make it do so? What has it really done?

6. Sketch from Tennemann and Morell the principles of Fichte's theory of the foundation of human knowledge.

7. Give Maret's place in philosophy. Explain the nature and objects of his great work, and exhibit its defects.

JOUFFROY AND STEWART.

1. What idea, according to Jouffroy, is the foundation of "all duty, right, obligation and rules of morality?" By what steps, do we rise to the conception of this fundamental idea? and what is its connexion with God and with beauty?

2. What two facts of our nature does Jouffroy point out as the basis of mysticism, and how does he support his opinion? Sketch its effects on the anchorites.

3. Give Jouffroy's estimate of the scepticism of the present age, as compared with that of the 18th century, and as it is in itself.

4. Bentham argues that to contend for an innate principle of moral action independent of utility is despotic and anarchical: explain this argument and the principle against which it is directed. Refute it, and show that his own principle has these very faults.

5. What share had Shaftesbury, Butler and Hutcheson respectively in the development of the doctrine of a moral sense? With what peculiarities do Hume and Mackintosh support that doctrine?

6. Show, from Stewart's arguments in reference to Cudworth and Hutcheson, that he did not consider reason by itself, or feeling by itself, to be the faculty by which we distinguish right and wrong. How far is Jouffroy justified in asserting that Stewart "inclines to adopt reason, though declaring that the question is of little importance, if it is once admitted that the words good and evil represent simple and real qualities of actions."

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ANNUAL EXAMINATIONS: 1864.

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METAPHYSICS AND ETHICS.
HONORS AND SCHOLARSHIPS.

Examiners: { REV. JAMES BEAVEN, D.D.
REV. PROFESSOR MURRAY.

THOMSON.

1. Show the utility of some acquaintance with logic, even if not fully matured, and on ground the most unlikely. Illustrate this from the faculty of *anticipation*.

2. Connect definition with one kind of immediate inferences.

3. Point out the distinction between formal and material truth, and show the relations which the four principal criteria of truth bear to each.

4. What are categories, and what is the use of a table of them? Examine Aristotle's table by this test.

LOCKE, WITH COUSIN'S CRITIQUE; KANT'S CRITIQUE OF THE PURE REASON.

1. *a.* What, according to Cousin, are the two enquiries which may be made with regard to ideas, and which of these should come first?

   b. With which of these does Locke begin?

c.   What objection may be urged against Locke's method in this respect?

2. How has this method of Locke influenced philosophical researches generally in his school?

3.   *a.*   What is the distinction, on which Cousin insists, between the *logical* and the *chronological* order of our ideas?

    b.   Illustrate this distinction with reference to the idea of *time*.

4. State Cousin's objections to the following doctrines of Locke, that

    a.   All words are derived from sensible ideas;

    b.   All words are purely conventional;

    c.   All general ideas are merely words;

    d.   Words are the sole causes of errors.

5. What is the distinction, which Kant institutes, between knowledge *a priori* and knowledge *a posteriori*?

6.   *a.*   Explain the difference between *analytic* and *synthetic* judgments.

    b.   Explain the question in which Kant sums up the problem of the pure reason, *How are synthetic judgments a priori possible?*

7. What is Kant's distinction between *transcendental* and *transcendent?*

8.   *a.*   What does Kant understand by *Transcendental Aesthetic* and *Transcendental Logic* respectively?

    b.   What are the two parts into which Transcendental Logic is divided, and the enquiries to which each is devoted?

9. In what sense does Kant use the word *idea?*

10. *a.*   What does he understand by an *antinomy* of the pure reason?

    b.   State any one of the antinomies.

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FOURTH YEAR.

POLITICAL ECONOMY.

HONORS AND SCHOLARSHIPS.

Examiner: Rev. James Beaven, D.D.

MILL.

1. Give Mill's definition of labour generally, and compare it with Senior's, especially with regard to their accuracy. Show the several workings of both bodily and mental labour.

2. "From that time it is the law of production from the land, that in any given state of agricultural skill and knowledge, by increasing the labour, the produce is not increased in an equal degree."

What are the results of this law? What counteracting principle, and how does that work? What remedies, and when and how far are they effectual?

3. How does it come to pass that the expressions—that wages depend upon the demand and supply of labour, and that they depend upon the proportion between labour and capital,—are equivalent to each other? Explain the laws which govern the proportion of population in any one locality.

4. Show that credit by itself does not increase capital. What then are its advantages? Explain the different ways in which credit is made to answer the purposes of money.

5. Discuss the question of restricting the issu of bank notes to one establishment, or allowing a plurality of issuers.

6. Show the effect of tithe, considered as a permanent tax on land, on the price of food and the rate of profits. What other effects has it?

LIEBER.

1. Support the opinion that ethics ought and can be applied to politics. Why ought others besides statesmen to be taught so to apply them? How do these reasons apply more strongly to modern times?

2. Point out the permanent and variable elements in the formation of a good form of government, and pply them to the discussion of the question—which is the best government?

3. Discuss the case of smuggling.

4. "In Hesse-Cassel it was found that far too many young men received a university education, thus preparing them for careers in which they could not succeed, owing to the number of applicants. A law was passed which allowed the children of certain parents only to study in the universities."
What subject do this illustrate? Discuss the principle here involved, and show some of its workings.

5. State and explain the duties of representatives in legislative bodies in regard to speaking, votes of money, and enacting laws.

6. In war, who are to be considered as enemies, and why? What harm may rightly be done to them, and why?

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FIRST YEAR.

ANATOMY.

FOR HONORS.

Examiner: WM. T. AIKINS, M.D.

1. Describe the posterior extremity of the fifth or sixth rib—the lower extremity of the radius—and the head, neck, and adjoining part only of the femur.

2. Give the attachments of the muscles which flex and extend the fore-arm, with the ligaments of the elbow joint.

3. Describe the stomach and its relations.

4. Describe the kidney and its relations.

5. Describe the pericardium; its attachments and uses.

6. Describe the left side of the heart, with the course and relations of the thoracic aorta.

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ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

PHYSIOLOGY.

Examiner : M. BARRETT, M.A., M.D.

1. Describe the methods by which the organic may be separated from the inorganic constituents of bone: state their relative proportions, and name the several earthy components.

2. Describe the course of the nutritive fluid in the shaft of a long bone.

3. Describe the several coats of an artery, and mention the characteristic differences between an artery and a vein.

4. Give a description of areolar tissue, naming its structural elements, its various positions and its purposes.

5. Mention the chief agents in gastric digestion, and describe the gastric mucous membrane.

6. How are the nitrogenous excretions eliminated from the system? and mention the chief forms under which they appear.

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ANNUAL EXAMINATIONS: 1864.

FIRST YEAR.

CHEMISTRY.

Examiners: { HENRY CROFT, D.C.L.
H. Y. HIND, M.A.

1. Describe the process of taking the specific gravity of a solid heavier than water.

2. To what standard are the specific gravities of gases referred?

3. What circumstances affect the boiling points of liquids?

4. By what means may bodies be crystalised?

5. Describe the preparation and properties of oxygen and hydrogen.

6. Mention the principal hydracids and the general method of forming them.

7. Describe the preparation and properties of chlorine.

8. Mention the sources and properties of carbonic acid.

9. Mention the distinguishing characters of the alkalies, alkaline earths, and earths proper.

10. Mention the principal oxides of iron, giving formulas.

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FIRST YEAR.

CHEMISTRY.

FOR HONORS.

Examiners: { HENRY CROFT, D.C.L.
{ H. Y. HIND, M.A.

1. Reduce 112° Fahrenheit to Centigrade and Reaumur, and 60° Cent. to Reaumur and Fahrenheit.

2. What is the cause of the ascent of liquids in narrow tubes?

3. What is meant by the latent heat of steam?

4. What circumstances are essential to combustion?

5. Explain the formation of hydrogen.

6. Describe the preparation of common phosphoric acid; give its formula and those of its soda salts.

7. Mention the sources and modes of preparation of light and heavy carburetted hydrogen.

8. Describe the preparation of the carbonates of potassa ad soda.

9. From what minerals are the salts of barium and strontium obtained, and how?

10. Give the formulas of the oxides of manganese, iron, copper, lead, tin, and mercury.

11. From what substance is arsenious acid obtained; what are its principal properties, and why is it often found in sulphuric acid?

12. What other elements are usually ranked with arsenic, and why?

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SECOND YEAR.

PHYSIOLOGY.

Examiner: M. BARRETT, M.A., M.D.

1. How is the blood exposed to the action of the air in the lungs; and how many cubic inches of air are exchanged, under ordinary circumstances, at each respiration?

2. What nerves penetrate the pulmonary substance, following the ramifications of the bronchus, and of the pulmonary artery?

3. Describe the structure and function of the heart in the adult.

4. Name the most remarkable nerves proceeding from the ganglia of the thoracic portion of the sympathetic.

5. What are the peculiarities of the blood of the vena portæ?

6. Describe the glands of the duodenum and ileum, and state what is known of the functions of the latter.
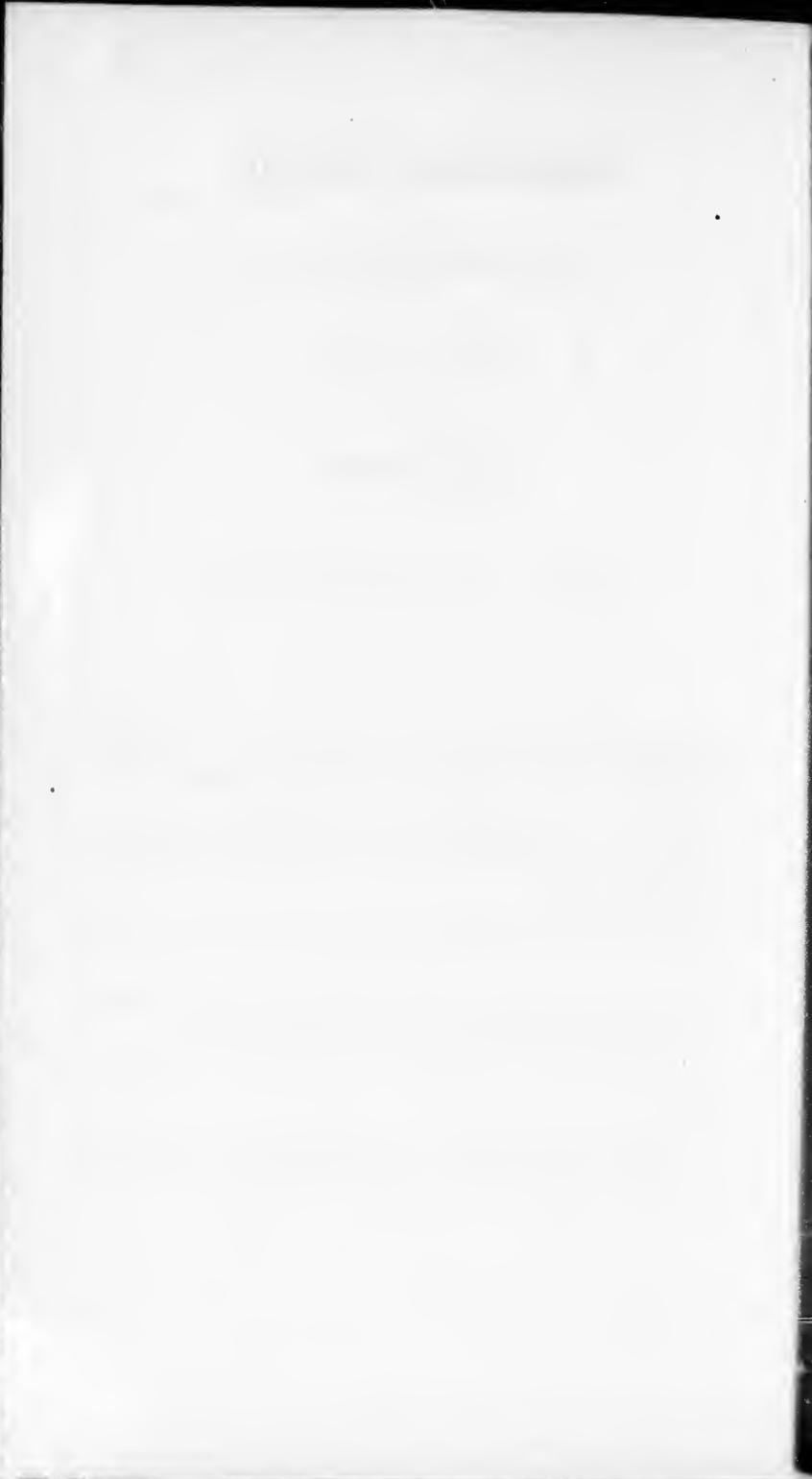
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SECOND YEAR.

CHEMISTRY.

FOR HONORS.

Examiners: { Henry Croft, D.C.L.
{ H. Y. Hind, M.A.

1. Describe the phenomena observed when gutta percha is rubbed with flannel.

2. Describe an electrical machine and its mode of action.

3. Describe the condensing electroscope and its mode of action.

4. Describe Grove's galvanic battery. What is the direction of the current?

5. Give Ampere's theory of magnets, and show how a powerful magnet may be made.

6. Give the present definition of organic chemistry, and shew why older definitions are erroneous.

7. Give the sources, preparation and properties of hydrocyanic acid.

8. Give the sources and formulas of methylic, ethylic, and amylic alcohols.

9. In what organic bodies do sulphur and cyanogen occur?

10. Give some of the fatty acid series, and show how they differ from each other.

11. What are the amides and nitriles; how are they obtained?

12. What are the compound ammonias; how obtained? Give instances.

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SECOND YEAR.

CHEMISTRY.

Examiners: { HENRY CROFT, D.C.L.
{ H. Y. HIND, M.A.

1. What are the general properties of magnets?

2. What is meant by the term electrical excitation?

3. Describe some of the effects of a discharge from a Leyden jar.

4. Describe Volta's pile.

5. What elements enter into the composition of natural organic bodies?

6. Explain the general principle of organic analysis.

7. Give some instances of the artificial formation of organic bodies.

8. How is cyanogen obtained; what are its properties and composition?

9. What are the products of the fermentation of sugar?

10. Into what classes are the sugars divided, and how may grape sugar be formed?

11. What is the nature of gun cotton?

12. What are the vegetable alkaloids? Mention the most important.
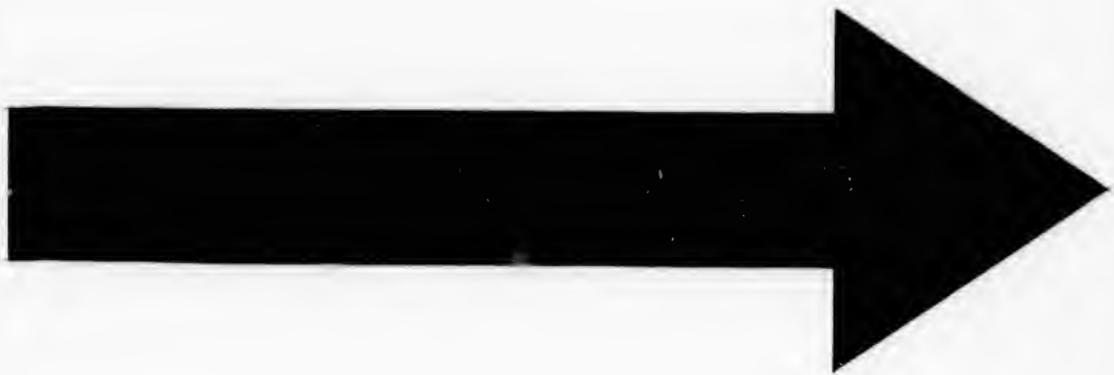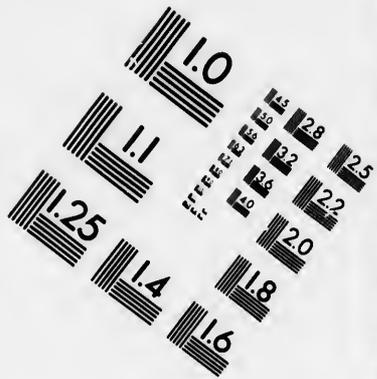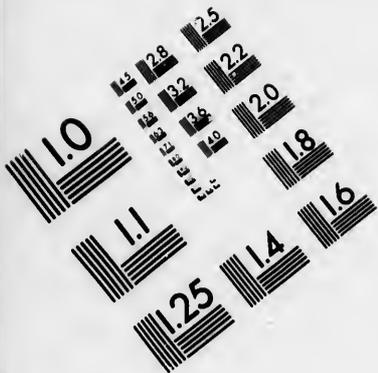
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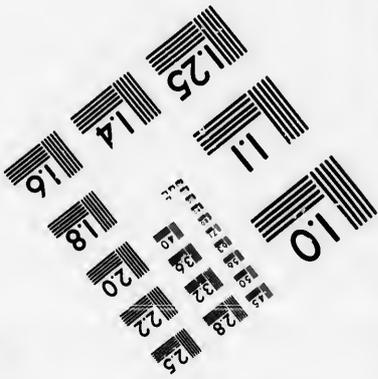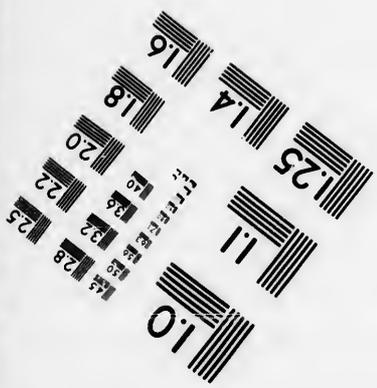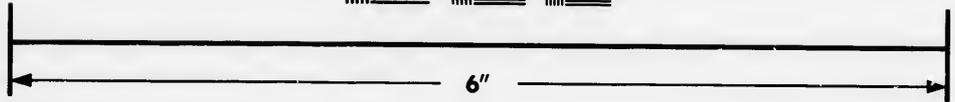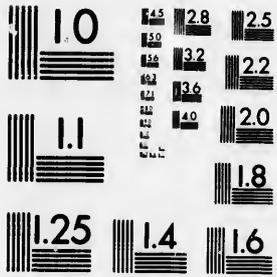
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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

BOTANY.

Examiners: { REV. PROFESSOR HINCKS, F.L.S.
T. J. COTTLE, ESQ.

1. What are the two principal kinds of organizable material of which plants are formed? How do they differ in chemical composition?

2. Deposits on the walls of cells and vessels, what is their nature, and how is their uniformity interrupted?

3. Describe the structure and mode of increase of endogenous and exogenous wood, and show that three sections are required to examine by the microscope the nature of the latter, whilst two suffice for the former.

4. What is meant by the term phyllodium? Give an example.

5. What is chorisis? What are its two kinds? What class of phenomena is it supposed to explain?

6. Principal modes of placentation of seeds, with an explanation of their origin.

7. What is the position of the embryo in respect to the albumen in the seeds of grasses, as wheat, rice, Indian corn, &c.? How is the gluten disposed in the seed of wheat?

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8. What is the nature of the reproductive system of ferns?

9. The bloodroot or puccoun—what is its scientific name? to what natural order does it belong? what medical properties belong to it?

10. Aconitum napellus—monkshood—to what order does it belong? What are the general properties of the order, and how are they manifested in this species?

11. Name some Canadian examples of the order Scrophulariaceæ. What are the prevailing properties of the order? Name one or two other important medicinal plants belonging to it?

12. Give an analysis of the orders of the class Endogenæ.

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SECOND YEAR.

THERAPEUTICS AND PHARMACOLOGY.

Examiner: Uzziel Ogden, M.D.

1. What are the sources of magnesiæ sulphas, and how is it obtained from each?

2. How is potassæ nitras prepared artificially?

3. What alkaloids are obtained from Peruvian bark? What are their therapeutical differences, and from which variety of bark are they respectively obtained?

4. Name the chief alkaloids of opium, and state their therapeutical difference.

5. What are the therapeutical properties and uses of sulphur, its dose, and officinal preparations?

6. What is the strength of vinum antimonii?

7. What are the therapeutical properties, uses and doses of zinci sulphas, cupri sulphas, and argenti nitras?

8. State the formulæ of the hypophosphites of lime, soda, potash, and ammonia.

9. What are the physical properties of gamboge? What are its therapeutical properties, and how are these modified by the dose?

10. Where is jalap obtained, what are its chief constituents, and what is its dose?

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THIRD YEAR.

PRACTICE OF MEDICINE.

Examiner : UZZIEL OGDEN, M.D.

1. Describe the course, symptoms, and treatment of pertussis.

2. What are the symptoms, duration, metastases, and treatment of cynanche parotidea ?

3. What are the causes of endocarditis, and its chief physical results ?

4. What are the symptoms and treatment of tonsillitis ?

5. How are the symptoms of gastric ulcer, and cancer of the stomach modified by the position of the disease ?

6. What are the symptoms of cholera morbus, and how would you treat it ?

7. What is the sarcoptes hominis, and how would you treat its effects ?

8. What are the symptoms and signs of acute bronchitis ?

9. What are the symptoms of cystitis, and how would you treat it ?

10. Enumerate the symptoms and derangements associated with atonic gout.

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THIRD YEAR.

SURGERY.

Examiner: WM. T. AIKINS, M.D.

1. State with particularity the hygienic treatment of the sick; especially of those likely to be long confined in-doors.

2. State the symptoms, diagnosis and treatment of hydrocele of the tunica vaginalis.

3. Diagnose and treat an acute abscess.

4. State the causes, symptoms and treatment of fracture of a rib when simple, and again when compounded with wound of the lung.

5. Name the dislocations of the humerus, stating the parts necessarily, and others occasionally injured by the accident, with the diagnosis and treatment of the most frequent luxation.

6. A man has been stabbed in the thigh and loses rapidly bright red blood; what is the diagnosis and treatment?

7. Give the treatment of acute traumatic inflammation of the knee joint in a previously healthy constitution.

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THIRD YEAR.

OBSTETRICS, &c.

Examiner : C. J. Philbrick, F.R.C.S, Eng.

1. What are the symptoms and proofs of pregnancy ?

2. What is labour ?

3. What presentations occur ?

4. In funis presentation, what are the characteristics, and what is the treatment ?

5. What are the causes of post partum, hœmorrhage and what is the treatment ?

N. B.—These questions are also for Honors.

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ANNUAL EXAMINATIONS : 1864.

THIRD YEAR.

MEDICAL JURISPRUDENCE.

Examiner: C. J. PHILBRICK, F.R.C.S., ENG.

1. What is strangulation ?

2. What appearances attend it ? and what may be confounded with it ?

3. Determine that a woman has been delivered of a child.

4. Determine the time of the delivery.

5. What are the symptoms of poisoning by strychnia ?

6. What are the tests for strychnia ?

N. B.—Also for Honors.

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ANNUAL EXAMINATIONS: 1864.

THIRD YEAR.

COMPARATIVE ANATOMY.

Examiner : M. BARRETT, M.A., M.D.

1. Note the differences existing between fishes and reptiles in respect to the articulation of the scapular arch with the occiput; and also in regard to the communication of the eye, ear and nose respectively with the respiratory tract.

2. Describe the testes or spermatic organs of birds, as to their position, structure, and periodical development.

3. In what essential respect do the long bones of birds differ from those of mammals? and enumerate instances of extraordinary development of pneumatic cellular diploë between the two tables of the skull in certain mammalia.

4. What is the the physiological relation of the co-existence of the mammary glands with a well developed epiglottis?

5. What substance replaces uric acid in the urine of herbivorous animals, and what are its most remarkable properties?

6. Compare the human skull with that of the anthropoid apes, in reference to the position of the foramen magnum, the angles which the condyles make with the horizon, and the extent of the zygomatic arches.

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THIRD YEAR.

CHEMISTRY.

Examiners: { Henry Croft, D.C.L.
H. Y. Hind, M.A.

1. Give the tests for potassa and ammonia.

2. Give the tests for protoxide and peroxide of iron.

3. Give the tests for oxide of copper.

4. What impurities occur in hydrochloric acid; how detected?

5. Give the best tests for lead.

6. Give the best tests for oxide (red) of mercury.

7. What metals are precipitated white by sulphide of ammonium?

8. What reagents are used in dividing the acids into groups?

9. How is uric acid detected?

10. Give the best test for strychnine.

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THIRD YEAR.

CHEMISTRY.

FOR HONORS.

Examiners: { HENRY CROFT, D.C.L.
H. Y. HIND, M.A.

1. How may sulphuric acid be freed from arsenious and nitric acids?

2. Describe the process of detecting arsenic when absorbed into the tissues.

3. Give the tests for antimony.

4. What metals are precipitated by hydrochloric acid, and how are they distinguished?

5. What metals are precipitated from acid solutions by hydrosulphuric acid?

6. How may sulphocyanic, meconic, and acetic acids be distinguished?

7. Give the tests for zinc, chromium, and aluminum.

8. How may phosphoric acid be detected in a fusible calculus?

9. How may oxalate of lime be recognised?

10. What process would be adopted in detecting blood on linen or steel?

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ANNUAL EXAMINATIONS; 1864.

CANDIDATES FOR M.B.—FOR PRIMARY EXAMINATION, OR SECOND YEAR SCHOLARSHIP.

ANATOMY.

Examiner: WM. T. AIKINS, M.D.

1. Describe the first cervical vertebra, designating also the points of muscular and ligamentous attachment.

2. What are the boundaries of the femoral ring?

3. Describe the anatomy of the inguinal canal and rings.

4. Give the situation, shape, attachments, structure and visceral relations of the diaphragm, the nature of its openings, and what they transmit.

5. Give the origin, course and distribution of the nerves supplying the diaphragm.

6. Describe the extent and relations of the brachial artery, its branches and their distribution.

7. Describe the origin, course, termination and use of the portal vein.

8. Describe the origin, course, termination and use of the thoracic duct.

9. Give the dissection of the region of the neck lying between the os hyoides and the inferior maxilla.

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DEGREE OF M.B.

PHYSIOLOGY.

Examiner : M. BARRETT, M.A., M.D.

1. Describe the hepatic circulation, and state what changes are effected in the blood passing through this organ.

2. Name the principal components of the biliary secretion, and give Pettenkofer's test for bile.

3. Describe the structure and function of the fœtal heart.

4. Give the microscopical anatomy, and function of the kidney.

5. How may the specific gravity of the urine be determined without the aid of the urinometer, and what information does a knowledge of the specific gravity afford?

6. Trace the longditudinal fibres which are to be seen on raising the superficial layer of the pons varolii, both upwards and downwards; name the nerves connected with this tract, and the function to which they are subservient.

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DEGREE OF M.B.

PRACTICE OF MEDICINE.

Examiner: UZZIEL OGDEN, M.D.

1. What are the symptoms, usual period, of attack, and treatment of acute podagra?

2. What are the most frequent causes of hæmoptysis, and how would you treat it?

3. How would you diagnose between the false membranes of croup and diphtheria, and how would you treat the latter disease in a child four years old?

4. What are the most frequent causes of hæmaturia, and how would you treat it?

5. A few months ago I was called to see a boy 14 years of age, who was thin, pale, and slightly anasarcous; his appetite was bad, bowels confined; urine pale; very much increased in quantity; specific gravity 1005; very albuminous and containing oil globules. How would you have treated him, and what would have been your prognosis?

6. How would you treat acute bronchitis in the adult? Write your prescription for the acute stage

7. A young man having studied hard all winter is attacked near the close of the session with severe headache, giddiness, and occasional vomiting, head alternately hot and cold, face pale, eyes pained by light and bowels confined. What is most likely to be the nature of his illness, what other symptoms would assist your diagnosis, and how would you treat him?

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CANDIDATES FOR M.B.

SURGERY.

Examiner: WM. T. AIKINS, M.D.

1. Give the general and local treatment for acute inflammation of a part, and the reason for each step in said treatment.

2. Diagnose and treat a case of acute periostitis.

3. State the treatment, (hygienic, and other,) of scrofulous synovitis.

4. State with particularity the treatment for oblique fracture of the shaft of the femur.

5. Under what circumstances would fracture of the skull require the employment of the trephine ?

6. State the several steps to be taken in one of the larger amputations.

7. In malignant diseases what conditions would warrant and what forbid an operation with the knife ?

8. Name the usual causes, symptoms and treatment for retention of urine.

9. What is the treatment for a bite inflicted by a rabid animal ?

10. What are the several varieties as to the condition of the tumor, &c., of inguinal hernia, and the treatment for each ?

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CANDIDATES FOR M.B.

OBSTETRICS, &c.

Examiner: C. J. PHILBRICK, F.R.C.S., ENG.

1. What is menstruation? and what may be mistaken for it?

2. On what do irregularities in menstruation depend?

3. What are the absolute proofs that a woman is in labour?

4. You are called to attend a woman who has been in labour more than twenty-four hours, and the child can only just be reached by the finger: what conditions may exist, and what is the treatment?

5. A mother suckling her child exhibits certain symptoms: what symptoms indicate that she is again pregnant?

*6. Describe the structure, mode of growth and functions of the placenta.

*7. Describe the diseases of the placenta, and the consequences to the mother and the conception.

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* Honor Questions.
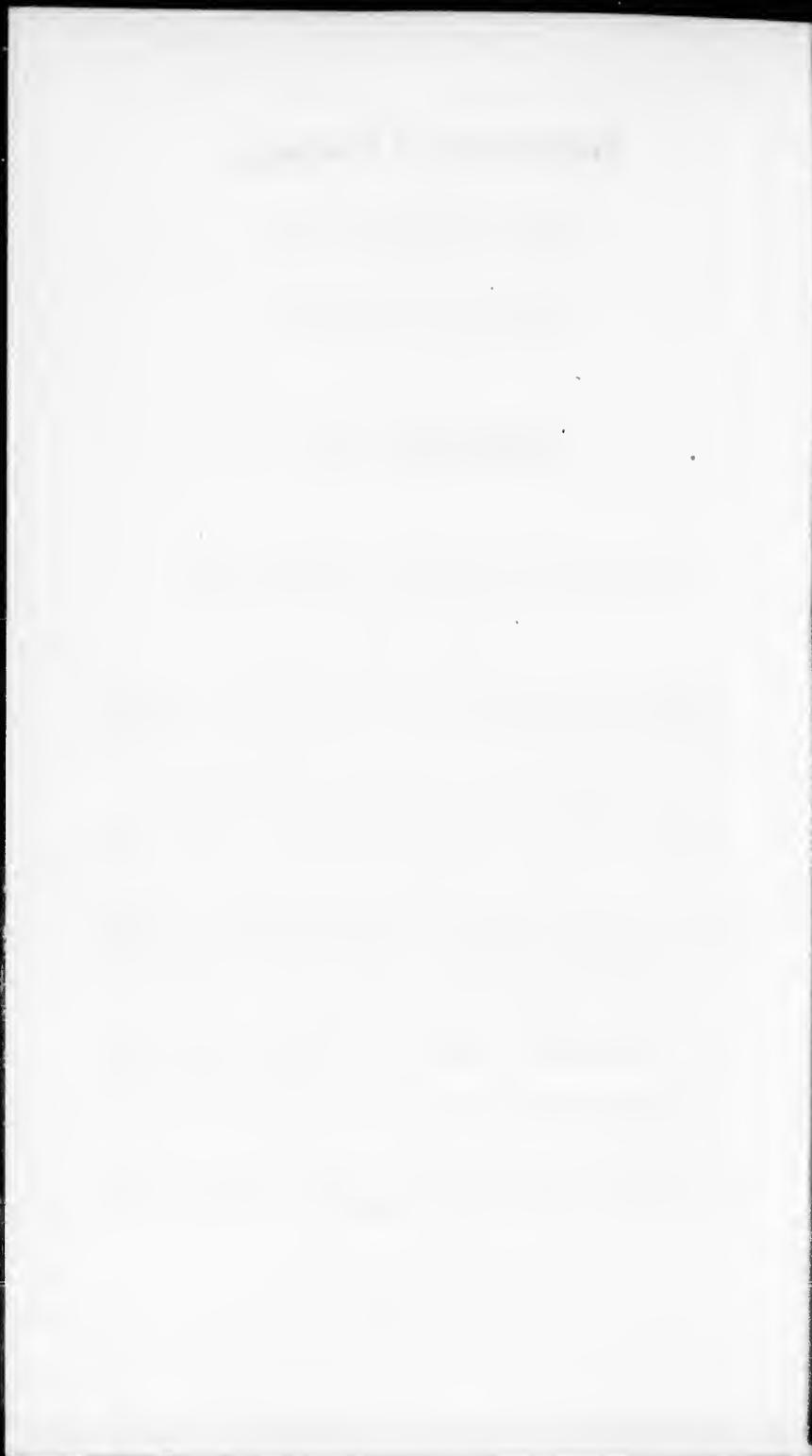
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DEGREE OF M.B.

THERAPEUTICS AND PHARMACOLOGY.

Examiner: Uzziel Ogden, M.D.

1. What are the therapeutical properties of gallic acid, and what is its dose?

2. How is the ferri ammonio citras prepared, and what is its dose?

3. Where is diosma crenata obtained, and what are its therapeutical properties?

4. What are the therapeutical properties of potassæ bitartras, and in what doses would you give it?

5. How is syrupus ferri iodidi prepared, what are its therapeutical properties, uses and dose?

6. What are the doses of the hypophosphites of lime, soda, potash, ammonia, and quinine? In what respects do they differ in their effects on the system, and what care should be observed in their administration?

7. Vinegar was given in the treatment of some of the sequelæ of scarlatina during a recent epidemic in Hamilton. Can you tell me its supposed modus medendi?

8. Name the most valuable antispasmodics, their doses and modus operandi.

9. For what disease is sulphur a specific?

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ANNUAL EXAMINATIONS: 1864.

FOURTH YEAR.

CHEMISTRY.

Examiners: { Henry Croft, D.C.L.
{ H. Y. Hind, M.A.

1. Arrange the non-metallic elements in groups, giving reasons.

2. What metallic elements are ranked with one of these groups, and why?

3. Give the definition of monodi and tribasic acids, give instances and refer to types.

4. Give the formulas of the magnesian sulphates, the double magnesian sulphates and the alums.

5. Define organic chemistry, and give the types to which organic compounds may be referred.

6. Give the general formulas of the alcohols, aldehydes, and fatty acids, showing how the latter are derived; refer all to types.

7. Account for the formation of so-called sulphuric ether.

8. Give the mode of preparation of cyanogen—urea—uric acid—morphine—formic acid—glycerine.

9. To what class of bodies may the fats and oils be referred, how are they acted on by potassa?

10. Give the general process for the extraction of the alkaloids, and give their characters.

11. What are the ammonium bases, how may they be obtained? Give their characters.

12. Give the chemical compositon of the more common vesical calculi.

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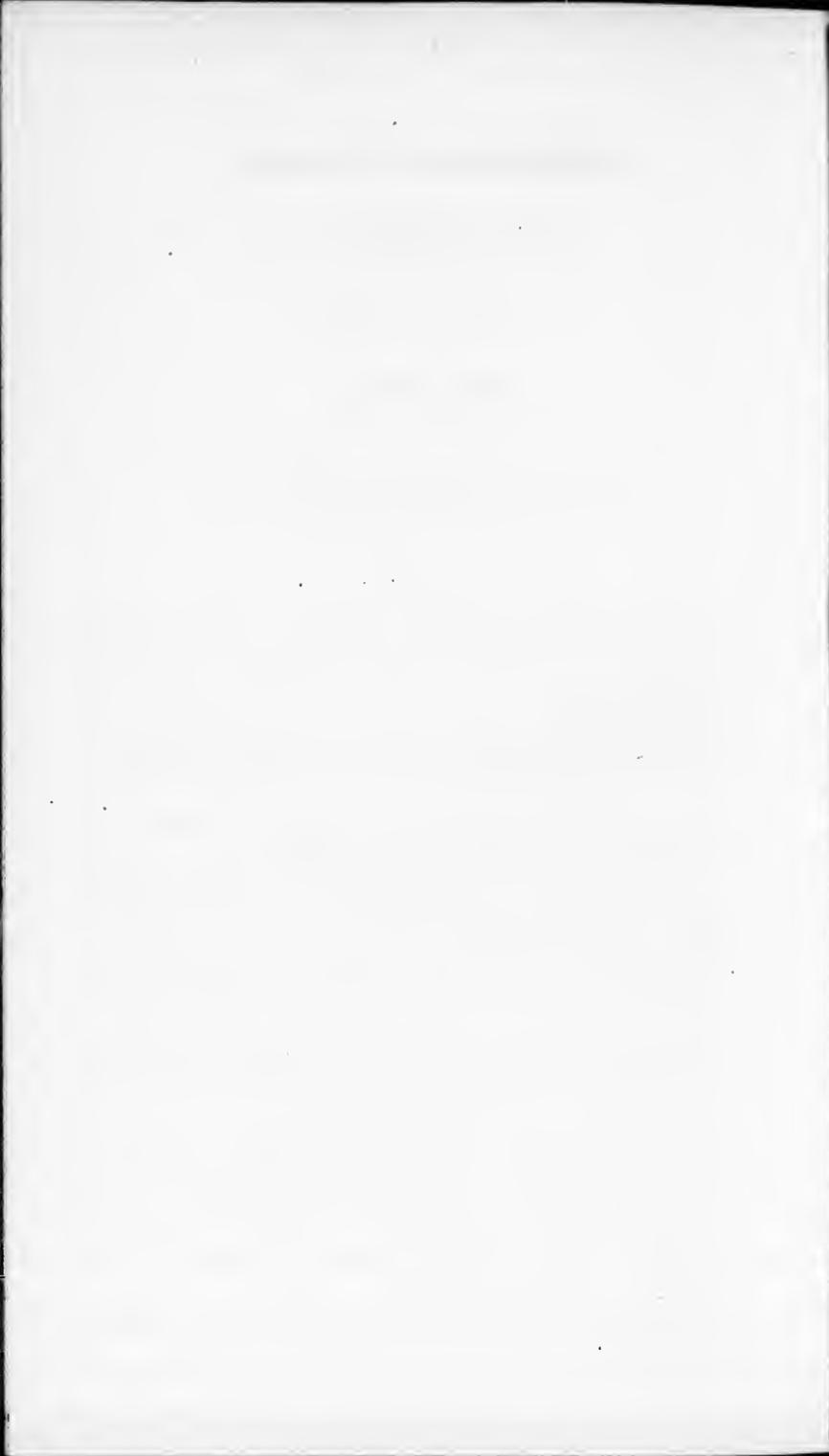
University of Toronto.

ANNUAL EXAMINATIONS: 1864.

FOURTH YEAR.

PRACTICAL CHEMISTRY.

Examiners: { HENRY CROFT, D.C.L.
{ H. Y. HIND, M.A.

1. What impurities may occur in sulphuric acid, and how may they be detected?

2. What are the usual impurities in carbonate of soda, and how detected?

3. Give the distinguishing tests for baryta, strontia, and lime.

4. What metals in solution give yellow sulphides; how may they be distinguished?

5. What metals are precipitated black from alkaline solutions only, and how are they distinguished?

6. Mention all the liquid tests for arsenious acid.

7. How may strychnine be separated from an organic mixture and detected?

8. Give the tests for morphine and opium.

9. Give the tests for blood and bile.

10. Give the tests for iodine, sulphur, phosphoric, boracic and oxalic acids.

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CANDIDATES FOR M.B.

MEDICAL JURISPRUDENCE.

Examiner : C. J. PHILBRICK, F.R.C.S., ENG.

1. Determine that a wound has been produced before death.

2. Determine that a bruise has been produced before death.

3. What are the symptoms of poisoning by urea ? and what post mortem conditions confirm the point?

4. What are the tests of morphia?

*5. What should cause you to suspect poisoning by noxious vapours ?

*6. Describe the characteristics of poisoning by oxalic acid, sulphuric acid, corrosive sublimate, arsenic, sugar of lead.

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* Honor Questions.

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AUSTIN'S PROVINCE OF JURISPRUDENCE.

Examiners: } ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Give a brief abstract of the outlines of Mr. Austin's lectures.

2. How does he distinguish between the different kind of laws?

3. Distinguish between *command*, *duty*, and *sanction*.

4. Explain what is meant by the theory of *utility* as the source of certain laws.

5. What are the different kinds of laws *improper*, in contradistinction to laws properly so called.

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

AUSTIN'S JURISPRUDENCE.
HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Mention some of the objections of Mr. Austin to the theory of *utility* as a source of law?

2. Mention some of the arguments in favour of the theory of *moral sense.*

3. What is the distinction between laws set by a *determinate* and an *indeterminate* body of persons?

4. Distinguish between the different forms of government?

5. Distinguish between "positive law," and "positive morality"?

University of Toronto.

SECOND YEAR.

BOWYER'S CIVIL LAW.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Give a brief sketch of the rise and progress of Roman jurisprudence.

2. Give a general view of the Institutes.

3. What are the different branches of the law of things?

4. Distinguish between a legacy and a *fidei commissum*.

5. What is an obligation *in solidum*?
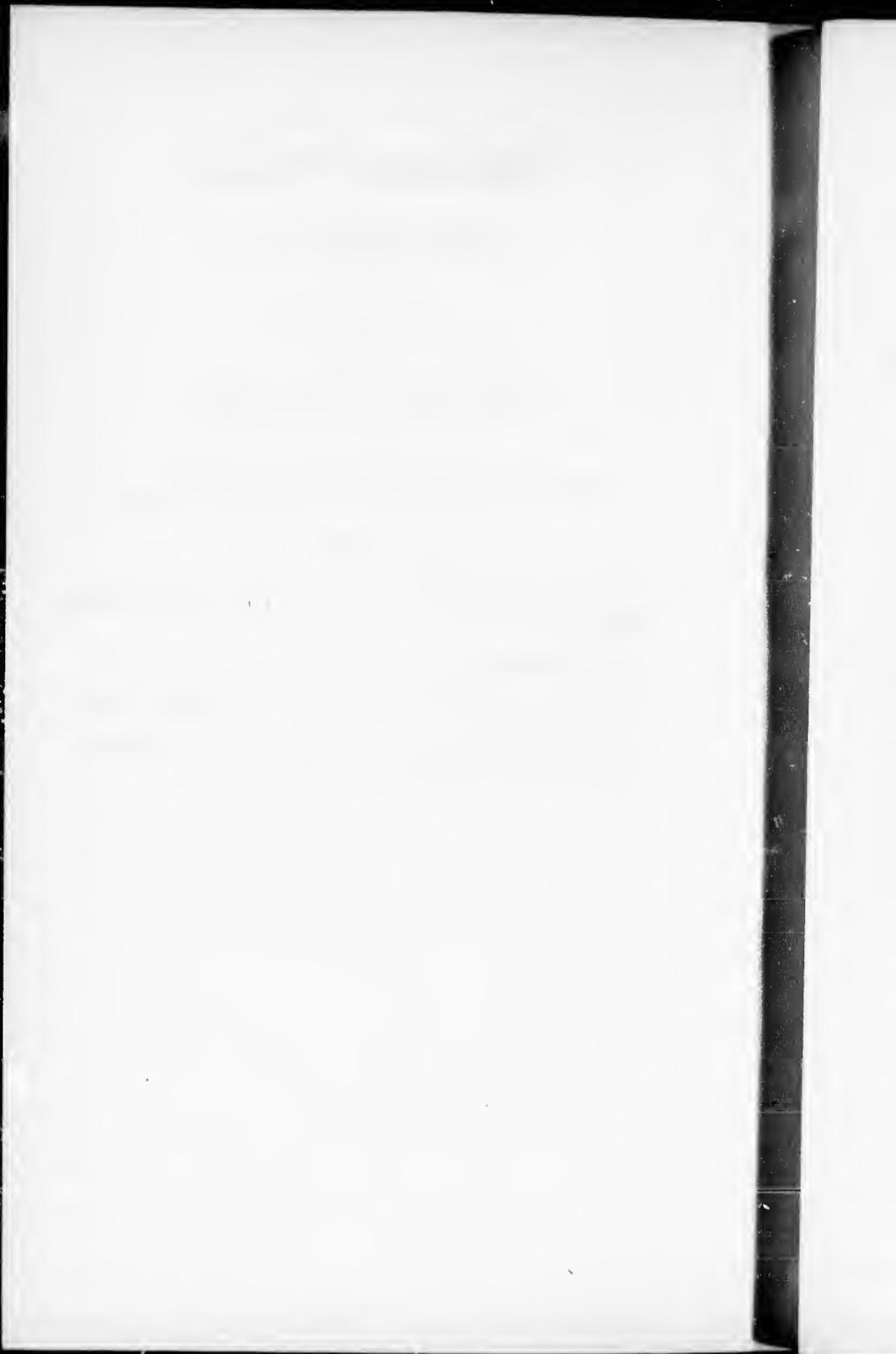
University of Toronto.

ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

BOWYER'S CIVIL LAW.

HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q.C., LL.D.
 EDWARD FITZGERALD, M.A., LL.B.

1. Distinguish between *mutuum, commodatum, depositum,* and *pignus.*

2. What are the different obligations *quasi ex contractu?*

3. What different kinds of contracts are involved in the consideration *de societate?*

4. Classify "actions," and explain the nature of each.

5. What are *interdicta* and their divisions?

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University of Toronto.

SECOND YEAR.

HALLAM'S CONSTITUTIONAL HISTORY.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What were the different changes in the English Church during the reigns of Henry VIII., Edward VI., and Mary?

2. What were some of the conflicts between the Crown and Commons during Queen Elizabeth's reign?

3. What were the causes of the civil war between Charles the First and his parliament?

4. What led to the restoration of Charles II.?

5. Give the chief constitutional measures passed during his reign.

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SECOND YEAR.

HALLAM'S CONSTITUTIONAL HISTORY.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What was the act of uniformity passed during the reign of Charles II. and its effect?

2. What were the principal constitutional acts passed during the reign of William III.?

3. What was involved in the trial of Sacheverel?

4. What was the state of the constitution during the reign of Queen Anne?

5. What are the principal terms in the legislative union of England and Ireland?

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SECOND YEAR.

SMITH'S MERCANTILE LAW.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A. LL.B.

1. On what principle is it that one partner can bind another within the scope of the partnership business?

2. Define a joint stock company. Are there any such in this country, and if so name some of them?

3. What title and rights does the transfer of an overdue note acquire? Explain fully.

4. What claim can a trustee make upon a policy of insurance effected by him as such trustee on the life of another?

5. What are the provsions of the 17th section of the Statute of Frauds, and in what respect is it affected by 9 Geo. IV., chap. 14.

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SECOND YEAR.

SMITH'S MERCANTILE LAW.
HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
{ EDWARD FITZGERALD, M.A., LL.B.

1. What is general average, and what is necessary in order that there must be a general average?

2. In maritime insurance what is the difference between express and implied warrants, and what is the meaning of the warranty that the ship is neutral property?

3. What was usury? Give an instance where under the former law it was legal to agree to take any rate of interest? What is our law on this subject?

4. Is there any statute in Upper Canada corresponding to "The Factor's Act" in England? Give some of the provisions of the English act.

5. At what place may a bill be presented for payment so as to charge the endorser, and what are the essentials of the notice of protest?

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SECOND YEAR.

SMITH'S MANUAL OF EQUITY JURISPRUDENCE.

Examiners: { ADAM CROOKS, Q. C., LL.D.
{ EDWARD FITZGERALD, M.A., LL.B.

1. Against what sort of mistakes does a Court of Equity relieve?

2. What is the difference between actual and constructive fraud? Give an example.

3. What is meant by "specific performance?" Will the court enforce specific performance of a parol agreement in any case? Explain.

4. Who can file a bill of interpleader? What offer ought the bill usually to make?

5. What is foreclosure and what is the effect of it? Who must be parties to the bill?

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University of Toronto.

SECOND YEAR.

SMITH'S MANUAL OF EQUITY JURIS-PRUDENCE.

HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What are legal and equitable assets? To which class does land belong?

2. Is ⟨…⟩ evidence admissible on behalf of either party in a suit ⟨…⟩ cific performance of a written agreement, and if so, ⟨…⟩ hat case or cases?

3. What is an injunction? How is it obtained? State some of the cases in which this remedy is applicable.

4. What is the doctrine of election? When is a widow put to her election where a devise is made to her by the will of her husband?

5. What is the chief difference between the power and liability of each of several trustees and executors? Explain fully.

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ANNUAL EXAMINATIONS: 1864.

SECOND YEAR.

WILLIAMS ON REAL PROPERTY.

Examiners: { ADAM CROOKS, Q. C., LL.D.
{ EDWARD FITZGERALD, M.A., LL.B.

1. What is an estate tail, an estate for life, and in fee, and state the rule in Shelly's case?

2. Define co-partners, joint tenants, and tenants in common.

3. What advantage in conveyancing was obtained by means of the lease and release under the Statute of Frauds?

4. What is dower, and how is it conveyed when the widow has married a second time?

5. Define vendor's lien and state some of the cases in which this lien will be held to be waived or destroyed?
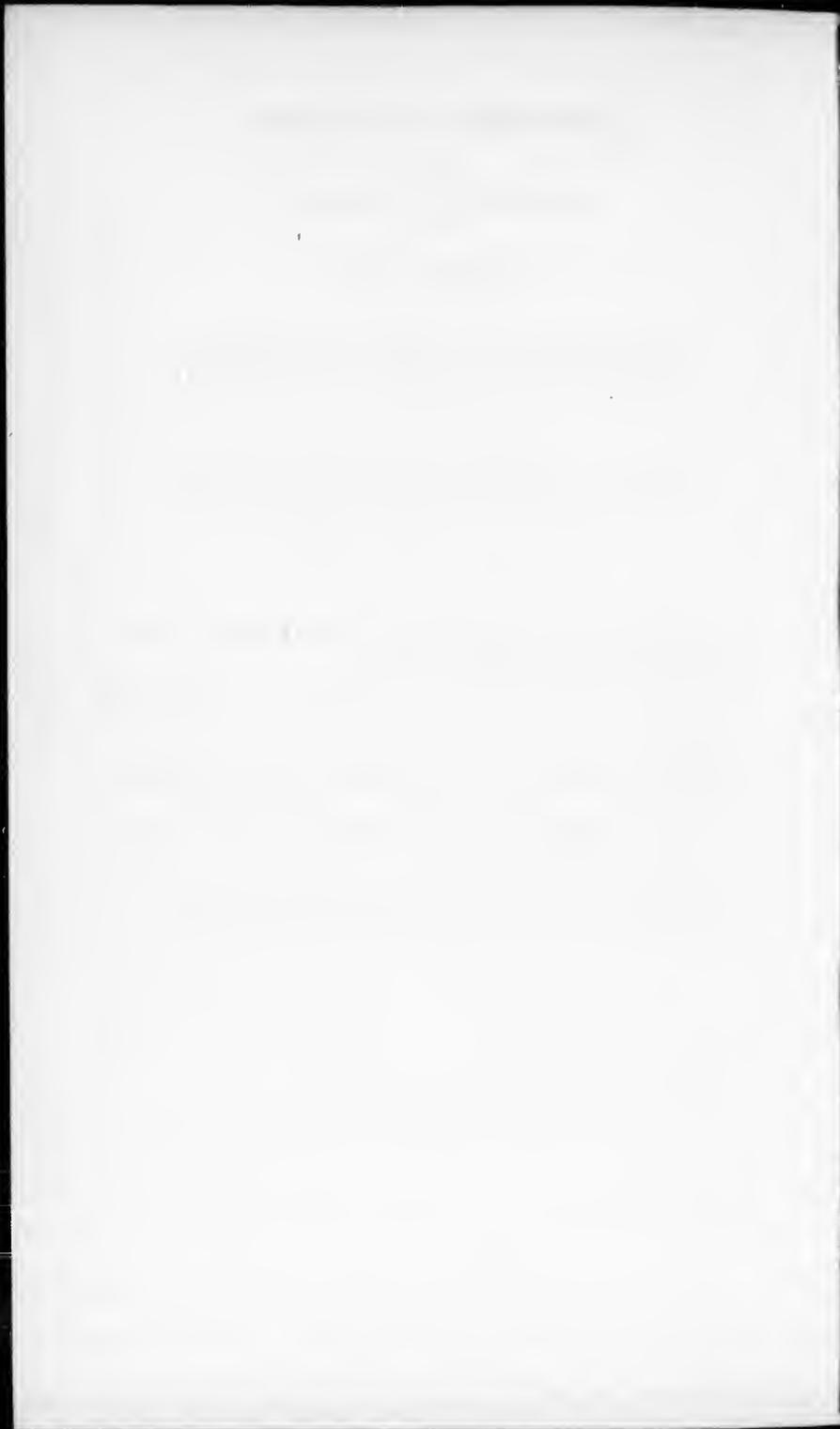
University of Toronto.

SECOND YEAR.

WILLIAMS ON REAL PROPERTY.

HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. If a conveyance is made to husband and wife, and the heirs of their bodies, what is the effect of it, and the estates conveyed by it?

2. Before 4th May, 1859, could a husband make a binding lease of his wife's land without her consent? State fully.

3. Define corporeal and incorporeal hereditaments, and what were the usual words of conveyance applicable to each? Is there any word now that will convey both?

4. What is the office of the *habendum* in a conveyance? Is a *habendum* necessary? Are the words "assigns," or "for ever," necessary to pass the fee in a conveyance or will?

5. What title can a mortgagee give who sells under a power of sale, and to whom must notice be given, if notice is required?

University of Toronto.

THIRD YEAR.

ARCHBOLD'S LANDLORD AND TENANT.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What leases require to be in writing, and what under seal? Give the authorities. What authority does an agent require to enable him to execute a valid lease?

2. What may be distrained for rent, and is the common law affected by any, and what statute or statutes on this head, and how?

3. What are emblements, and who are entitled to them?

4. What notice to quit is necessary in the case of tenancy from year to year, quarter to quarter, month to month, and week to week?

5. How may leases be validly assigned? Is a condition in a lease against assignment legal?

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THIRD YEAR.

ARCHBOLD'S LANDLORD AND TENANT.
HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What are the provisions of the statute relative to double rent, and to what cases does the statute apply?

2. By what authority is it that the grantee of the reversion can take advantage of a forfeiture of the lease, and to what sort of leases does this law apply?

3. What are tenants at will, and tenants on sufferance, and what rights has a tenant at will ordinarily after the determination of the will of the landlord?

4. What are fixtures as between landlord and tenant, and what is the chief test by which it may be known whether they are removable by the tenant?

5. What are ancient lights, and state the law respecting the same?

University of Toronto.

THIRD YEAR.

BURTON'S COMPENDIUM OF REAL PROPERTY.

Examiners: ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What are the different modes of alienation at common law, and by statute?

2. What is the effect of limiting a *use* upon a *use* in a conveyance?

3. Distinguish between the different kinds of *estates* recognised in law.

4. Define *rent*.

5. Mention the different kinds of *equitable* interests in land.

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THIRD YEAR.

BURTON'S COMPENDIUM.
HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q.C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. *Scintilla juris.*

2 Distinguish between actual and virtual seisin, and in deed or in law.

3. What is the difference between a mere *right* in contradistinction to an *estate* in lands?

4. How may a remainder be distinguished from a reversion? and mention some of its incidents.

5. What is an *estoppel?* how may it be created, and what are the general rules relating to it?

University of Toronto.

THIRD YEAR.

COX'S BRITISH COMMONWEALTH.

Examiners: } Adam Crooks, Q. C., LL.D.
Edward Fitzgerald, M.A., LL.B.

1. What are the objects and duties of a government?

2. Distinguish between its legislative and administrative functions.

3. What are the respective powers of the House of Lords and the House of Commons in Great Britain?

4. What are the arguments in favour of the existence of political parties?

5. What are the different judicial and administrative departments in Great Britain?

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THIRD YEAR.

COX'S BRITISH COMMONWEALTH.

HONORS AND SCHOLARSHIPS.

Examiners: { Adam Crooks, Q.C., LL.D.
{ Edward Fitzgerald, M.A., LL.B.

1. What is public opinion, and what are its just influences?

2. Give the arguments in favour of a property qualification for the exercise of parliamentary suffrage.

3. Compare the advantages of open and secret voting.

4. What is an action at law? and state briefly its procedure and different stages.

5. Distinguish between the different kinds of colonies.

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University of Toronto.

THIRD YEAR.

MITFORD ON PLEADING, &C.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What is the effect of the alienation of property *pendente lite* on the rights of the other parties to the suit?

2. What is a demurrer, and what does it admit, and describe some of the principal grounds of demurrer to a bill in equity?

3. What is an answer to a Bill, and how is it put in? What is the form of its commencement? What parts of the bill does it admit?

4. How do infants institute suits, and is there any difference in this respect between infants and married women?

5. How long is a defendant allowed to answer a bill? and how long an amended bill? and what is the practice where an infant is a defendant?
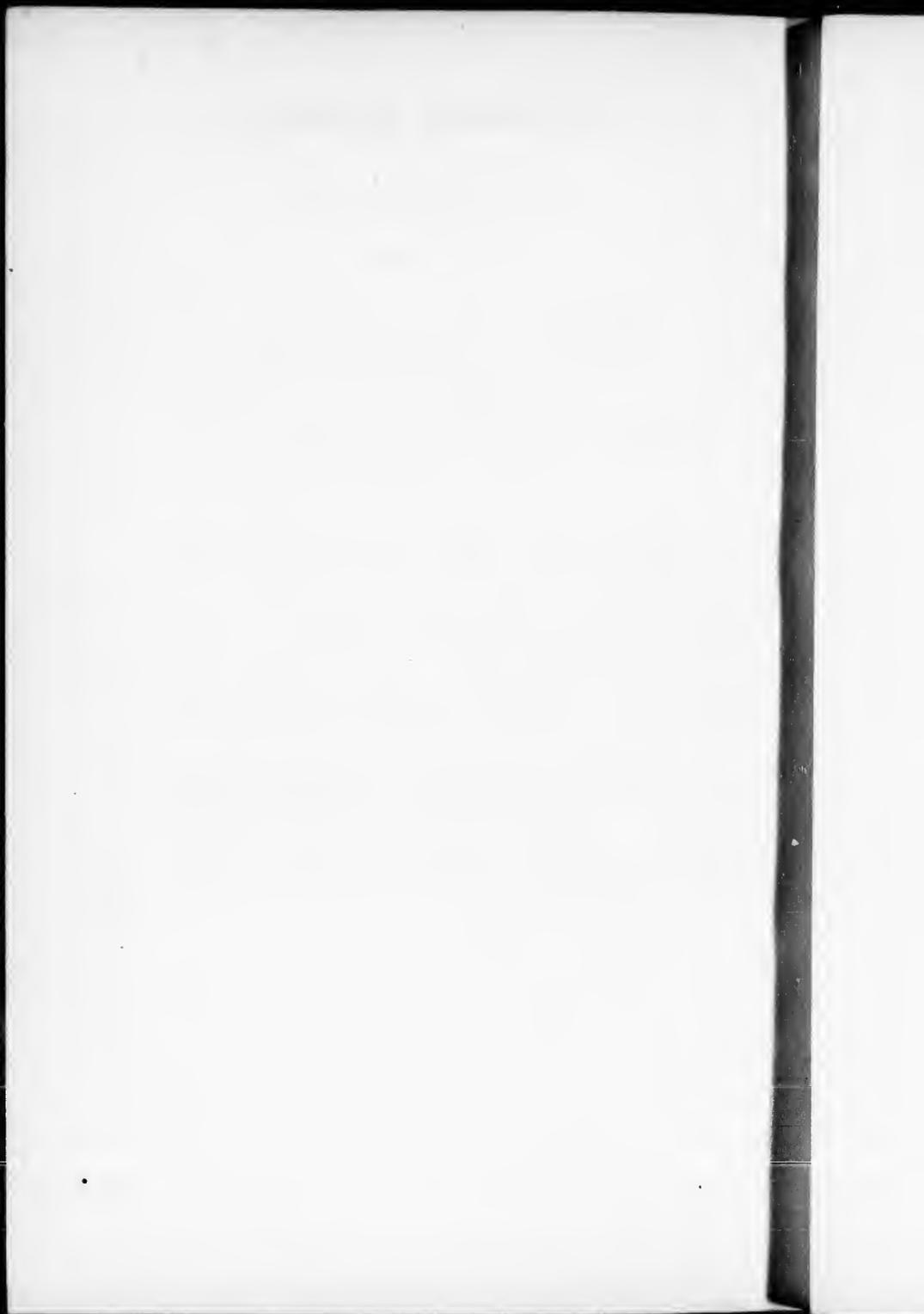
University of Toronto.

THIRD YEAR.

MITFORD ON PLEADING.
HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.,

1. Within what time was a mortgagor entitled to redeem a mortgage, and was that altered by the Chancery Act of 1837? In what respect?

2. What is the consequence if a defendant does not answer an amended bill? Answer fully.

3. Does a defendant ever require a next friend, and if so, in what case or cases?

4. What was the old method of setting up a defence of purchase for valuable consideration without notice, and what were the proper allegations? To a bill to enforce dower, is such a defence allowed?

5. What does a replication put in issue, and state generally when a plaintiff ought to file replication, or to amend his bill?

University of Toronto.

ANNUAL EXAMINATIONS : 1864.

THIRD YEAR.

SMITH ON CONTRACTS.

Examiners: { Adam Crooks, Q. C., LL.D.
Edward Fitzgerald, M.A., LL.B.

1. What are the provisions of the 4th section of the Statute of Frauds? Does the authority of the agent require to be in writing?

2. What are Champerty and Maintenance, and give other instances of illegal contracts, with their definitions?

3. What did a guarantee require to express in order to be binding? Write out one.

4. Can a voluntary conveyance be made good by reason of valuable consideration being advanced by an assignee of the voluntary grantee? Why?

5. Give some of the remedies at law and in equity for a breach of contract, and what is ordinarily the chief difference *between such remedies?*
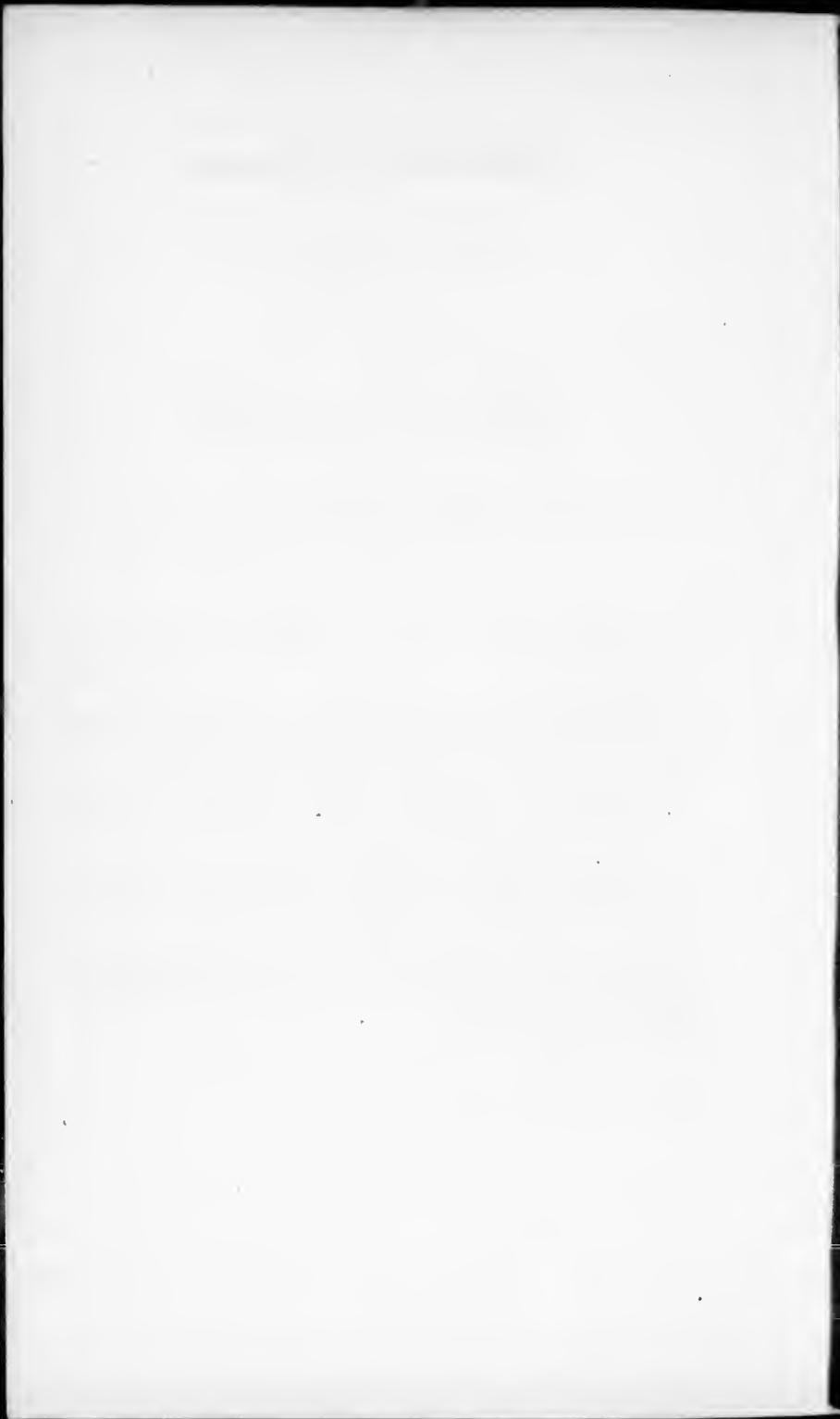
University of Toronto.

ANNUAL EXAMINATIONS: 1864.

THIRD YEAR.

SMITH ON CONTRACTS.

HONORS AND SCHOLARSHIPS.

Examiners: { Adam Crooks, Q. C., LL.D.,
Edward Fitzgerald, M.A., LL.B.

1. What is the law in reference to contracts in restraint of trade? Point out the different cases.

2. Is the contract of an infant void or voidable? What is the distinction?

3. What is ratification, and the effect of it? Can the principal ratify the act of his alleged agent? When can he not do it?

4. What are the Statutes of Limitation, and state the law as to the limitation of actions in cases of simple contract?

5. What were the exceptions in the English Statute of Limitations?

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University of Toronto.

THIRD YEAR.

WESTLAKE'S CONFLICT OF LAWS.

Examiners: } Adam Crooks, Q. C., LL.D.
Edward Fitzgerald, M.A., LL.B.

1. How far will a discharge in bankruptcy obtained in one country be recognised by the courts of another?

2. To what extent does *domicile* affect the *capacity* of a person?

3. Give a definition of *domicile*.

4. How does the *lex loci contractus* operate with respect to contracts?

5. What is the operation of the *lex situs* on property?
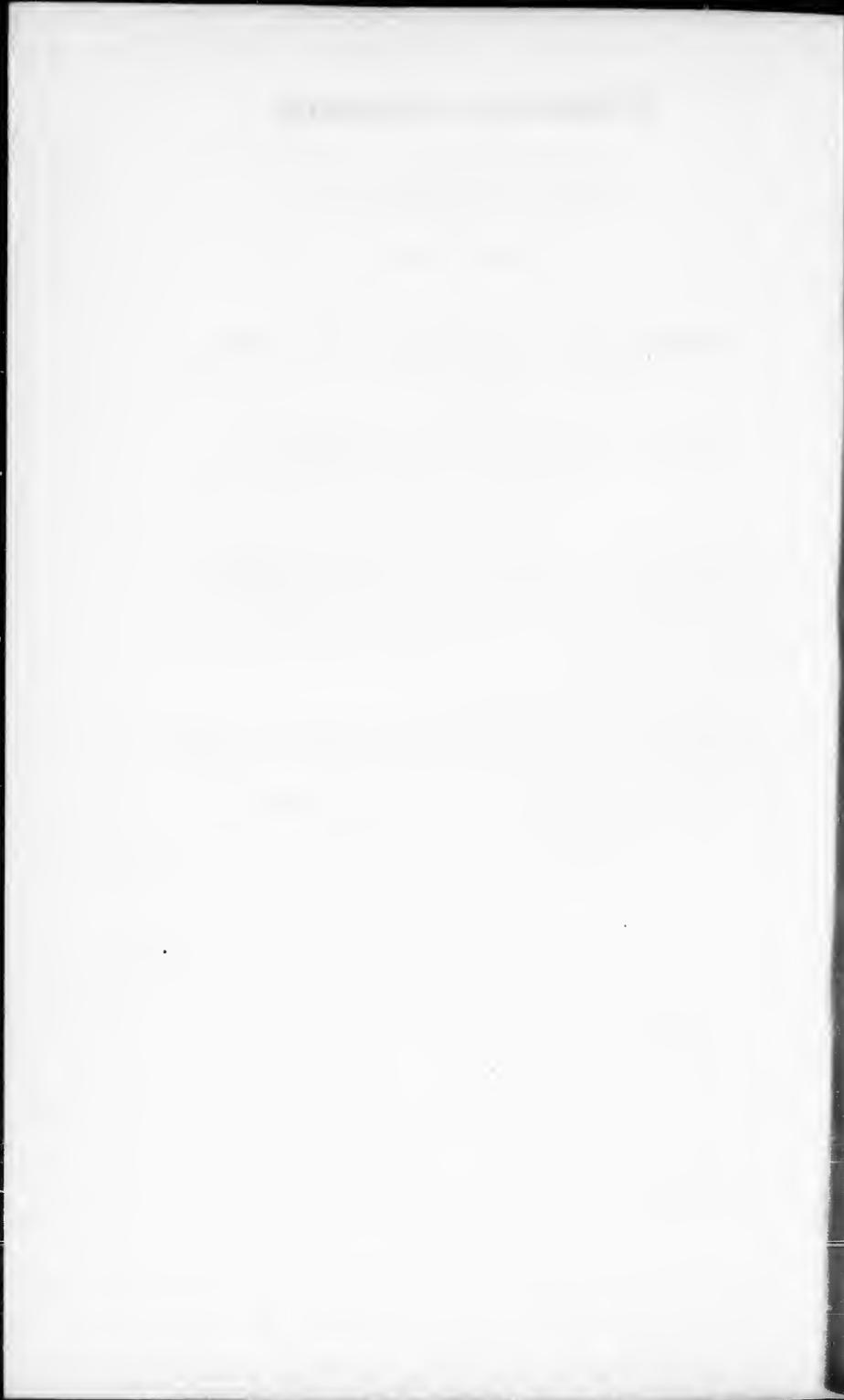
University of Toronto.

THIRD YEAR.

WESTLAKE'S CONFLICT OF LAWS.
HONORS AND SCHOLARSHIPS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
{ EDWARD FITZGERALD, M.A., LL.B.

1. Distinguish between a judgment *in personam* and *in rem* and their effects?

2. What is the extent of the principle "*actum locus regit*"?

3. What is the English rule as to allegiance, and how far does it extend?

4. Mention some of the questions in conflict with reference to divorce?

5. When testamentary instruments are executed abroad, what validity have they in England with respect to real and personal property?

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CANDIDATES FOR LL.B.

BLACKSTONE, VOL. IV.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What is treated of in the 4th Book of Blackstone's Commentaries ?

2. Distinguish between principals and accessories.

3. What are the different offences against public justice ?

4. What are the different kinds of homicide ?

5. What must exist to constitute the crime of larceny ?
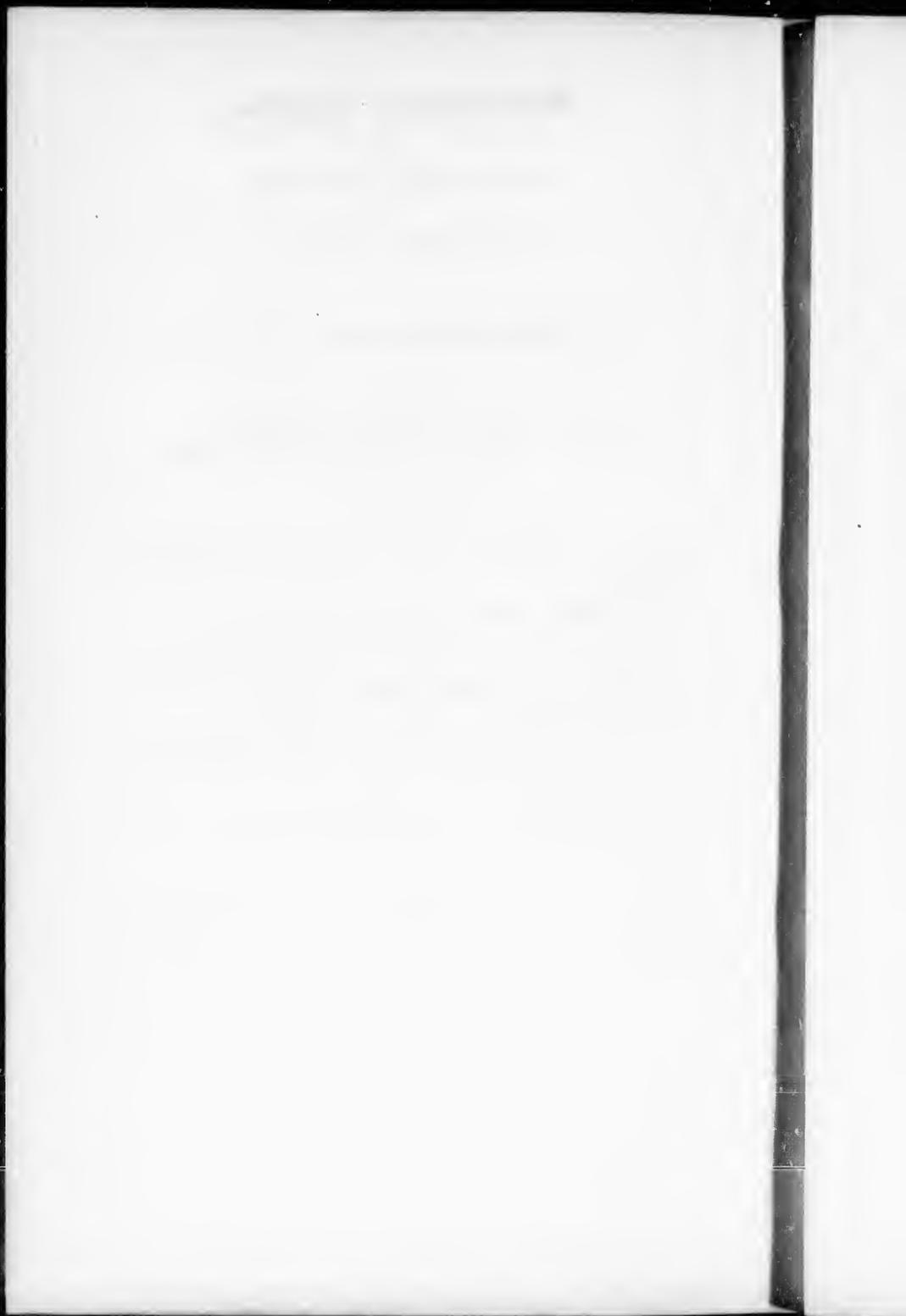
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CANDIDATES FOR LL.B.

BLACKSTONE, VOL. IV.
HONORS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Give a brief sketch of the rise and progress of the laws of England?

2. What are the different kinds of challenges in the trial by jury?

3. Mention the offences against public trade?

4. What are the different kinds of misprisons?

5. Distinguish between treason and sedition?

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CANDIDATES FOR LL.B.

GIBBON'S ROME, &c.

Examiners: { ADAM CROOKS, Q.C., LL.D.
{ EDWARD FITZGERALD, M.A., LL.B.

1. What are the different periods under which Gibbon considers the Roman Law?

2. What was the extent of the reformation effected by Justinian?

3. Into what different books are the Institutes divided?

4. What was the *status* of the wife under the Roman law?

5. Explain the Terentillian law

GIBBON & ARNOLD.

HONORS.

Examiners: $\begin{cases} \text{ADAM CROOKS, Q. C., LL.D.} \\ \text{EDWARD FITZGERALD, M.A., LL.B.} \end{cases}$

1. What were the principles of inheritance and succession in Roman jurisprudence?

2. What was the contract of locatio?

3. What are the principal points noticed by Gibbon in respect to rights of property?

4. Explain the Valerian and Canuleian laws?

5. What was the Licinian law?
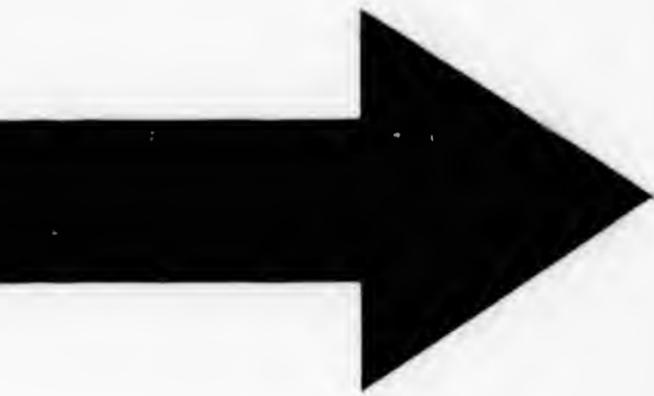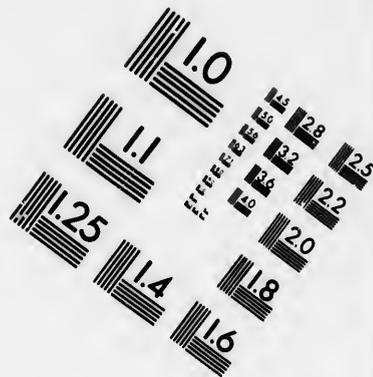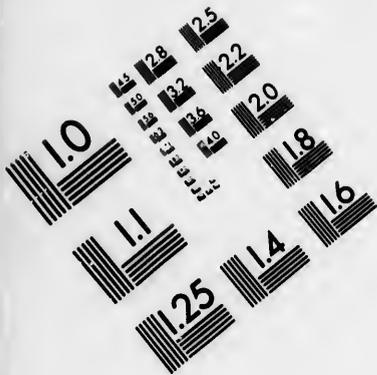
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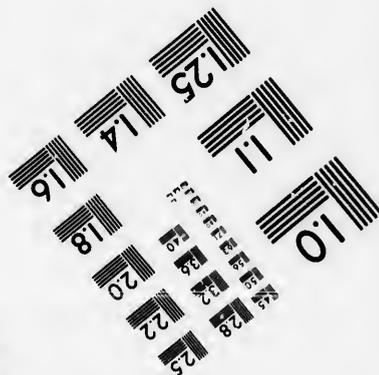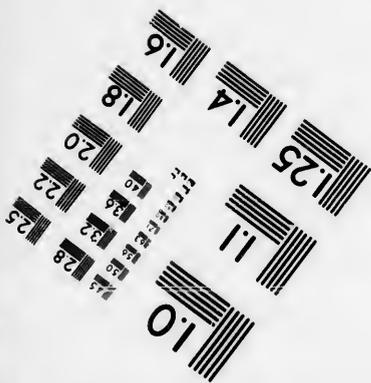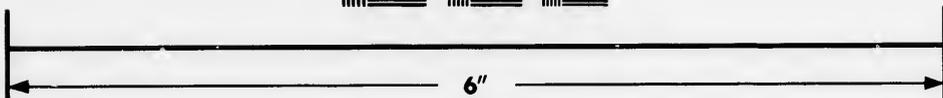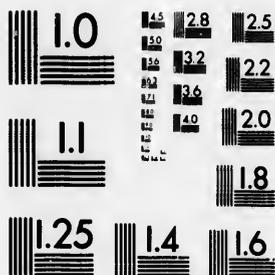
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CANDIDATES FOR LL.B.

JARMAN ON WILLS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. From what period does a will speak, and are there any, and what distinctions?

2. What is the doctrine of lapse? Does it apply when there is a devise to a class?

3. Is parol evidence admissible to explain, add to, or contradict the contents of a will? State the chief principles.

4. Will a general devise of lands by a mortgagee pass either the beneficial interest in the mortgage, or his estate in the lands? Answer fully.

5. What interest in personalty is conferred by words which create an estate tail in realty? Why?

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CANDIDATES FOR LL.B.

JARMAN ON WILLS.

HONORS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Can a married woman or infant make a will disposing of land, and if so, in what cases?

2. State the necessary formalities to be observed in the due execution of a will, so as to pass real estate?

3. What revokes a will? State the different cases of revocation.

4. What is the effect of a direction to an executor, to whom lands are devised, to pay certain debts or legacies?

5. What are the provisions of 9 George II., chapter 36? What is the rule against perpetuities? What are the provisions of the Thellerson Act?

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CANDIDATES FOR LL.B.

JUSTINIAN'S INSTITUTES.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Quibus constitutionibus et illud exprimitur, ut nisi caveant tutores vel curatores, pignoribus captis coerceantur.— *Lib.* 1, *Tit.* 24, *s.* 3.

   (*a*) Translate.

   (*b*) What constitutions are here referred to?

   (*c*) What were the relative powers and duties of guardian and ward in the Roman Law?

2. What are the different ways in which the *usufruct* would terminate?

3. How were servitudes extinguished?

4. What was the *heres necessarius?*

5. Explain the terms *capitis deminutio, res dominans obligatio, novatio, patria potestas.*

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CANDIDATES FOR LL.B.

JUSTINIAN'S INSTITUTES.
HONORS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Eodem numero sunt jura prædiorum urbanorum et rusticorum, quæ etian servitutes vocantur.—Lib. 2, tit. 3, s. 3.—Mention the different kinds of servitudes that are here referred to?

2. Explain *testamentum, calata comitia,* and *procinctus?*

3. Distinguish, between *res publicæ,* or *universitatis, res nullius, res sacræ, res religiosæ?*

4. What were the different modes of acquiring property in the Roman law?

5. Give the formula by which a *fide jussor* bound himself?

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MACKELDEY'S CIVIL LAW.
HONORS.

Examiners: { ADAM CROOKS, Q. C., L.LD.
{ EDWARD FITZGEARLD, M.A., LL.B.

1. By what different modes are rights terminated?

2. Distinguish between the *actio restitutionis*, and the *exceptio doli*?

3. Explain "juridicial possession"?

4. What is "*accessio*," and give its different classes?

5. Give a brief analysis of Mackeldey's treatise?

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CANDIDATES FOR LL.B.

SUGDEN ON VENDORS AND PURCHASERS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What are the provisions of the first and second sections of the Statute of Frauds?

2. If a person, without the consent of the owner, assumes to sell land, will the buyer be compelled to take the land, provided the owner subsequently agrees to convey? Why?

3. How may time be made to operate as if of the essence of the contract where it was not so originally?

4. If a purchaser after conveyance is evicted, what are his remedies?

5. What arrears of interest may be recovered in respect of money charged on land? Can more be recovered in any case?

SUGDEN ON VENDORS AND PURCHASERS.
HONORS.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. Is payment of purchase money a part performance, so as to take the case out of the Statute of Frauds, and what is the principle?

2. What title is a vendor bound to shew under a contract for the sale of land, and against whose acts must the covenants of the vendor in the conveyance extend?

3. What is an abstract of title, and ought it to shew?

4. In what case or cases do leases require to be registered, and do assignments of leases require registration?

5. State shortly the provisions of 27 Elizabeth, chapter 4, as to fraudulent deeds. Can the grantee or devisee of the grantor defeat a voluntary conveyance of the grantor by a sale for value, and is notice to the purchaser material?

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR LL.B.

SUGDEN ON POWERS.
HONORS.

Examiners: { Adam Crooks, Q. C., LL.D.
{ Edward Fitzgerald, M.A., LL.B.

1. Name the different kind of powers. What is a power given by will called?

2. If a testator directs his estate to be sold, can his executor sell? State the rule.

3. If the consent of a third party is required to the exercise of a power, when ought that consent to be obtained? Could such third party be the purchaser of property sold in pursuance of the power?

4. Does a power to mortgage authorise a sale, or *vice versa?* State the rule.

5. In whose favour will defective executions of powers be relieved against? Will it be in favour of volunteers?

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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR LL.B.

TAYLOR ON EVIDENCE.

Examiners: { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. State definitely the rule that a tenant cannot deny his landlord's title. Are there any exceptions?

2. In actions of tort what does the plea of not guilty put in issue? State fully.

3. State the rules for determining who has the right to begin at a trial.

4. State the cases in which a party has no right to cross-examine his opponent's witness.

5. What different kinds of evidence are admissible to prove handwriting?
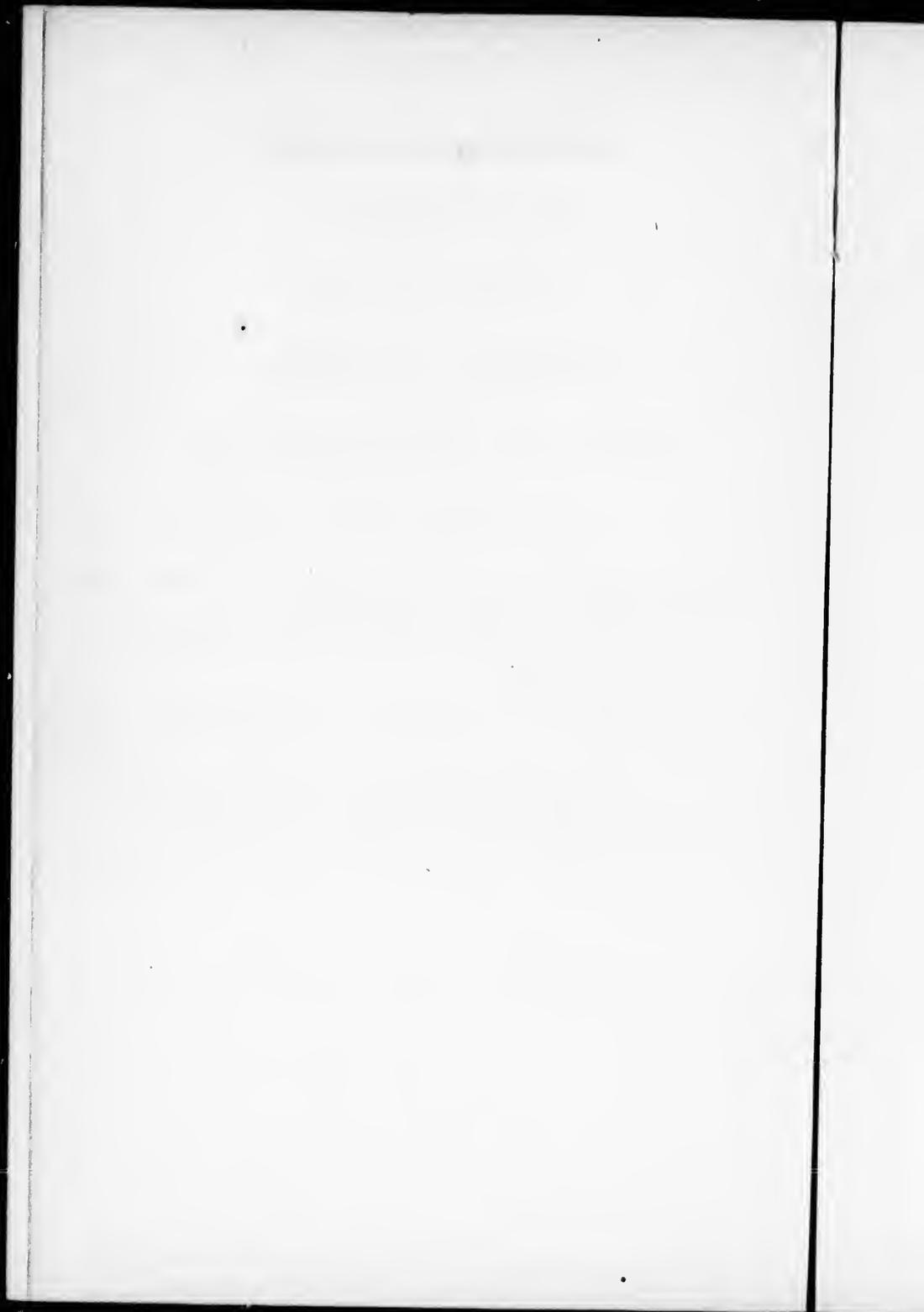
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ANNUAL EXAMINATIONS: 1864.

CANDIDATES FOR LL.B.

TAYLOR ON EVIDENCE.

HONORS.

Examiners : { ADAM CROOKS, Q. C., LL.D.
EDWARD FITZGERALD, M.A., LL.B.

1. What is primary and secondary evidence, and when does the giving of a notice to produce allow a party to give secondary evidence?

2. In what case or cases are dying declarations admissible as evidence, and what is essential to the admissibility of these declarations?

3. What promise to pay a debt is sufficient to take a case out of the operation of the Statute of Limitations, and what evidence is necessary of such promise?

4. By reference to what documents is a witness allowed to refresh his memory? When must they be produced at the trial or examination?

5. State some of the material alterations which will invalidate a written instrument in the hands of a party seeking to enforce it?