

college, embracing agriculture, practical science (including chemistry), civil engineering and the mechanical arts; and a conservatory of all the literary courses, each covering four years and leading to appropriate degrees. Two years are given to preparatory studies, drawing, painting, ancient and modern languages, and didactics form a part of the curriculum, the last being optional.

During the past year the faculty of the University was strengthened and its efficiency enhanced, and a greater number of baccalaureate degrees given than half the entire number during the previous decade.

The past year was distinguished by the erection of an astronomical observatory in co-operation with the national signal service; this was due to the public-spirited liberality of anonymous donors, whose benefactions are not the less appreciated because they were spontaneous.

The equipment of the observatory includes an equatorial telescope of eight-inch aperture, a transit instrument and various electrical devices, besides a sidereal break circuit chronometer.

**GEOGRAPHY—FIRST CLASS.**

*Examiner—D. J. GOGGIN.*

Time—two hours.

1. How is latitude determined at sea?
2. Why does the Isothermal line run so high in Alaska?
3. Describe physically, politically, and commercially one of the following places: British Columbia, Hindostan, England.
4. Draw a map of the Maritime Provinces, marking thereon the chief towns, mountains, rivers and gulfs, or bays.
5. Give the situation of the following places, citing historical circumstances connected with them: Lucknow, Mecca, Blenheim, Detroit, Richmond (U. S.), St. Helena, Plymouth Rock.
6. Show by reference to Asia, Europe, and America the importance of a knowledge of the reliefs of continents.
7. Compare the flora and fauna of South America and Africa. Account for the contrasts.

S. "To a great extent his (man's) thoughts and actions, his industrial pursuits, his social polity, and religious beliefs, are all affected by the physical circumstances or his position."—Page.

Briefly discuss this statement.

**HISTORY—FIRST CLASS.**

*Examiner—REV. CANON O'MEARA.*

Time—three hours.

1. Sketch briefly the history of Britain under the Romans.
2. Give a full account of what is usually called the conquest of Ireland.
3. Tell what you know of the writers of the Middle English period and their chief works.
4. Give an account of the development of English commerce under Queen Elizabeth.
5. Trace after Green the influence of the Bible on the English people.
6. Describe the Second Civil War and the death of Charles I.
7. State the causes which led to the Crimean War. Give a brief outline of its leading events.

8. Tell what you know of the "Company of 100 Associates," and its influence on the early history of Canada.

9. Describe fully the circumstances which led to the formation of the Canadian Confederation. Give the conditions upon which the various Provinces entered the Dominion.

10. Write a historical note on the present difficulty between Canada and the United States.

**READING—FIRST CLASS.**

Time—forty minutes.

Write out this passage, and mark as indicated in questions (b), (c) and (d).

*Por.*—You stand within his danger, do you not?

*Ant.*—Ay, so he says.

*Por.*—Do you confess the bond?

*Ant.*—I do.

*Por.*—Then must the Jew be merciful.

*Shy.*—On what compulsion must I? Tell me that?

*Por.*—The quality of mercy is not strain'd;

It droppeth as the gentle rain from heaven

Upon the place beneath; it is twice bless'd;

It blesseth him that gives and him that

takes;

'Tis mightiest in the mightiest; it becomes

the throned monarch better than his crown;

His sceptre shows the force of temporal

power,

The attribute to law and majesty,

Wherein doth sit the fear and dread of

kings;

But mercy is above the scepter'd sway.

It is enthroned in the hearts of kings;

It is an attribute of God himself;

And earthly power doth then show likest

God's

When mercy seasons justice.

—*Merchant of Venice.*

(a) What feelings and qualities of voice should mark the delivery of the above passage, in lines 5, 6, 7, 17 and 18?

(b) Indicate the rhetorical pauses in lines 6, 8, 13, 16, 17 and 18 by upright dashes.

(c) In lines 1, 3 and 6, respectively, which inflection would you use, the rising or the falling?

(d) Denote the words in the above extract requiring the ordinary emphasis of sense by a single under-line, and those requiring the special emphasis of feeling by a double under-line.

N. B.—The presiding examiner will also require each candidate to read, in his hearing alone, an extract from "The Merchant of Venice," of which no previous notice is to be given, and for which the maximum mark will be thirty (30.)

**EUCLID—FIRST CLASS.**

*Examiners—REV. CANON MATHESON, B. D.; REV. PROF. HART, M. A., B. I.*

Time—three hours.

(Algebraical symbols should not be used in the demonstrations, nor numerals in the figures, but plainly written capital letters.)

1. Define a straight line, a superficies, a right angle, a diameter, and write out the 12th axiom.

2. Upon the same base and upon the same side of it there cannot be two triangles that 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.

3. If one side of a triangle be produced, the exterior angle is greater than either of the interior opposite angles.

4. Equal triangles upon the same base and upon the same side of it, are between the same parallels.

If a quadrilateral is bisected by one of its diagonals and have two opposite sides equal, shew whether or not it is necessarily a parallelogram.

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

6. If a straight line drawn through the centre of a circle bisect a straight line in it which does not pass through the centre, it shall cut it at right angles; and if it cuts it at right angles it shall bisect it.

Draw a straight line perpendicular to a given straight line so that if it cuts this line in A and a given circle in B C, A B shall be equal to B C.

7. In equal circles, equal straight lines cut off equal circumferences, the greater equal to the greater and the less to the less.

O and P are any two points in a circle. With centre O and radius less than O P a circle is described so as to cut the first circle in A and B. Prove that P O bisects the angle A P B.

8. If a straight line touches a circle and from the point of contact a straight line be drawn cutting the circle, the angles which this line makes with the lines touching the circle shall be equal to the angles which are in the alternate segments of the circle.

Prove that the base of any segment of a circle makes equal angles with the diameter drawn through one extremity of the base, and with the perpendicular let fall from that extremity upon the tangent at the other extremity.

9. To describe a square about a given circle.

10. Define ratio and proportion, and explain what is meant by the terms *permutando*, *invertendo*, *componendo* and *convertendo*.

11. In a right-angled triangle, if a perpendicular be drawn from the right angle to the base, the angles on each side of it are similar to the whole triangle and to one another.

The middle point C of a straight line A B is the centre of a semicircle. If any third tangent P Q to the semicircle intersect in P and Q the tangents to it from A and B, prove that the rectangle contained by A P and B Q is equal to the square on A C.

**ANCIENT HISTORY—FIRST CLASS.**

*Examiner—REV. CANON O'MEARA.*

Time—one hour and a half.

1. "The Greeks, as we have already seen, were divided into many independent communities, but several causes bound them together as one people."—*Smith*. State and briefly describe the causes here referred to.

2. State the causes which led to the Peloponnesian War, and briefly describe its leading events.

3. Write historical notes on the following: Thermopylae, The Expedition of Cyrus, The Achaean League, The Peace of Analcidas.

4. Give a brief sketch of the two Triumvirates.

5. Write historical notes on the following persons: Romulus, The Gracchi, Pompey, Nero.