

ETYMOLOGY.—SECOND CLASS.

NOTE.—Candidates for Third Class Certificates will answer the first seven questions of this paper; and it is recommended to the local examiners that the per centage of marks, necessary in order that a candidate may pass, be taken on the value of these questions diminished by the marks assigned to questions 6 and 7. Candidates for Second Class Certificates will omit 5, 6 and 7, and answer the remainder of the Third Class Paper, together with their own special paper; and it is recommended that the per centage of marks necessary in order that a candidate may be ranked of a certain grade, be taken on the value of this work, diminished by the number of marks assigned to question 12 and 13.

1. In what cases is the final consonant doubled before an affix?
2. In the following words mark the accented syllable.—Advertisement, elegiac, opinionative, empyrean, sonorous, monosyllabic, anathema, mausoleum, horizon, diocesan.
3. Correct, where necessary, the spelling of the following:—Separate, harrassing, embarrassing, parallelogram, chicanery, belief, Huguenot, rociève, abstruce, absceind, impunc, inveagle, rhapsody, pthisic.
4. Mention prefixes, each in combination with some word, which denote rest and motion in time and place.
5. Give words in which the following affixes appear, and state the force of each affix:—"ism," "ling," "all," "ster," "ness," "acy," "ure."
6. Trace to their national origin:—Admiral, turban, scimitar, muslin, sago, sonnet, gazette, divan.
7. Derive the following:—Chimney, fascine, acoustics, vicissitude, gormandize, exaggerate, truth, forfeit, copse, synod.

ADDITIONAL FOR SECOND CLASS CANDIDATES.

8. In the following groups of verbs of similar signification, indicate the appropriate use of each verb:—Esteem, estimate, appreciate; grant, allow, bestow, concede; build, erect, construct; usurp, arrogate, assume.
9. Give words of Latin and English origin corresponding with the following: Apology, catalogue, democracy, eulogize, mystery, prophesy, sympathy.
10. Mention words—two in each case—derived from these Latin roots:—Arceo, caro, colo (are), falx, fiscus, gelu, grex, orior, sinus, tuco.
11. Trace the following to Greek roots:—Disastrous, antoeratic, epidemic, analyse, amnesty, optics, oxygen, fraantic, empyreal, isothermal, polygon, system.
12. What do you understand by the "imperfect incorporation" of words introduced from a foreign language? State the principles which characterize it, and give examples.
13. (a) Explain the term "Hybridism," and illustrate by examples. (b) Show that *icicle* is hybrid in appearance only.

EDUCATION.—SECOND CLASS.

1. Discuss briefly the question, What is Education?
2. What basis of classification would you adopt in an ordinary school? What elements besides mere proficiency would you consider?
3. State briefly the utility of Botany as a subject of study in Public Schools.
4. What means would you adopt to secure the interests of your pupils in the work of the school?
5. Give the principal arguments in favour of prizes in schools, and state what means you would adopt to reduce to a minimum the disadvantages of the prize system.
6. Name some of the uses and abuses of the monitorial system. What plan would you adopt in employing monitors in a Public School?
7. Describe how you would teach (1) Dictation; (2) English Grammar to a class of beginners; (3) Algebra.
8. State the Law (a) as to the proceedings to be taken on the formation of a new School Section. (b) The principal duties of trustees in Rural Sections.

EDUCATION.—THIRD CLASS.

1. What is meant by School Organization?
2. You take charge of a Rural School of 50 pupils, shew how you would proceed to classify.
3. Construct a Time Table for such a school.
4. Describe how you would proceed with a class beginning the study of Arithmetic.
5. What measures would you take to create an interest in the school throughout the section?
6. State the leading points of the Law in regard to Public School Teachers and their duties.
7. Describe how you would teach:
 - (1) Dictation.
 - (2) English Grammar to a class of beginners.

ARITHMETIC AND MENSURATION—SECOND CLASS.

1. Explain fully how to state and solve a question in simple proportion. A grocer sells $14\frac{7}{8}$ oz. for a lb., how much does he cheat a customer who buys to the amount of \$73.92?
2. Give ex. of the difference between Simple and Compound Practice. Convert £296 16s. 10 $\frac{1}{2}$ d. sterling into Canada currency. The £ being worth \$4.86 $\frac{3}{4}$.
3. What vulgar fractions will produce finite decimals, and why? Reduce to a decimal

$$\frac{\frac{2}{5} - \frac{1}{20}}{\frac{2}{5}} \times \frac{(8\frac{4}{7})^2}{12} + \left\{ (1 + \frac{1}{10}) \div (\frac{3}{2} + \frac{1}{4}) \right\} + \frac{2\frac{2}{3} - \frac{3}{10}}{17\frac{3}{4}}$$
4. A and B can do a work in 7 days, B and C in 8 days, and A and C in 9 days; in what time will (1) each separately, (2) all together, do the work?
5. Explain fully the terms Numerator and Denominator. Prove that both terms of a fraction can be multiplied or divided by the same number without changing the value of the fraction. Examine whether the common definition of multiplication holds in the case of fractions.
6. Examine the different cases of profit and loss. A merchant asked 30 per cent. advance on cost of goods, but finally took 30 per cent. less than price asked; how much did he gain or lose per cent.?
7. Show how to find the present worth of a debt payable at a future time without interest. I have 2,500 bls. of flour for sale, and am offered \$6.30 cash, or \$6.55 on 8 months. How much shall I gain by accepting the better offer, money being worth 8 $\frac{1}{2}$ per cent.?
8. Define insurance, policy, premium. A person insured a house for $\frac{4}{5}$ its value at 1 $\frac{1}{2}$ per cent. annually; after paying 6 premiums the house was destroyed, the entire loss being \$1,945. Find value of house.
9. The police returns for a certain year give 1,350 male offenders, and 1,150 female; the next year's returns show a decrease of 5.4 per cent. in the number of male criminals, and an increase of 8.4 per cent. in number of female. Find increase or decrease per cent. in whole number of criminals.
10. A board is 3 feet wide and 6 feet long, find its area; show clearly that your multiplier is not concrete. Find cost of carpeting a room 22 feet 6 inches long by 17 feet 9 inches wide; the carpet being 27 inches wide, and \$1.60 a yard.
11. The sides of a right angled triangle are 30 feet and 40 feet respectively, find the perpendicular from the right angle upon the hypotenuse.
12. It is required to lay out 70 acres, 3 roods, 26 $\frac{3}{4}$ perches of land in the form of a rectangle whose length shall be three times the breadth. Find the dimensions.

ARITHMETIC—THIRD CLASS.

1. Write in figures and expressive words the numbers seven hundred and one units in the 6th period, fourteen in the 5th, one hundred and twenty in the 3rd, fourteen in the 2nd, and nine in the 1st.
2. Show that the corresponding operations in the simple and compound rules are based on the same principles. How many years, months, days, hours, and minutes from 20 minutes past 4 o'clock P.M., July 15th, 1862, to 25 minutes past 11 o'clock, June 29th, 1871?
3. State the principles on which is based the rule for finding the G. C. M. of two numbers. Apply them to find that of 3,621 and 1,581.
4. The driving wheels of a locomotive are $17\frac{1}{2}$ feet in circumference, and the trucks $10\frac{3}{8}$, what distance must the train move to bring wheel and truck into the same relative positions as at starting?
5. State the general principles on which the rules of fractions depend; and find the simplest form of

$$(7\frac{3}{4} + 5\frac{1}{4}) \text{ of } \left\{ 4\frac{1}{2} \times \frac{7}{8} \right\} + 1\frac{3}{8} \times (3\frac{1}{2} - \frac{9}{10})$$
6. From the sum of $2\frac{1}{4}$ acres, $\frac{2}{3}$ of $3\frac{1}{2}$ acres, $\frac{9\frac{1}{2}}{25\frac{1}{3}}$ roods, and $\frac{2}{11}$ of $1\frac{1}{4}$ perches, take 4 acres 25 perches 12 square yards.
7. A man divided a farm among three sons; to the first he gave 80 acres, to the second $\frac{1}{3}$ of the whole, and to the third $\frac{1}{4}$ as much as to both the others. How many acres did the farm contain?
8. Find the sum, difference, and product of 3.456 and .425.
9. Find values of 2.7345 according as the unit is £2 5s., or 5 acres, 2 roods, 10 perches, or 6 oz., 10 dwts., 16 grs.
10. Sold 20,900 feet of lumber for \$331.62 $\frac{1}{2}$, gaining thereby \$78.37 $\frac{1}{2}$. What had it cost per C?