ARITHMETIC.

NOTE.—Candidates are to take the first question and any six others. In the first question four marks are to be allowed for form, and twelve for the calculation; but no value shall be given for the calculations unless the result is absolutely correct. A maximum of five marks may be added for neatness.

1. Make out the following account, neatly and accurately, in proper form:

Nicholas Nickleby bought the goods from you on March 3rd, and paid you $10 on account April 8th.

$3\frac{3}{4}$ lbs. tea @ 80c. 300 lbs. sugar @ $4\frac{3}{4}$c. 45 yds. print @ $11\frac{1}{2}$c. $2\frac{1}{2}$ gals. syrup @ 65c. $12\frac{1}{2}$ yds. towelling @ $12\frac{1}{2}$. $\frac{3}{4}$ doz. knives and forks @ $2.50. 27 lbs. cheese @ 15. 1 lb. 10 oz. lemon peel @ 32c. per lb. [16]

2. A load of wood, 10 ft. long, 3 ft. 8 in. wide and 3 ft. high, was sold for $3.

(*a*) What was the price per cord?

(*b*) At $4 per cord what would the load be worth? [14]

3. How much will it cost to paint the outside and both floors of a two-storey cottage, 36 ft. long, 33 ft. wide, and 18 ft. high, at 10c. per sq. yd. The walls to be 18 in. thick, and no allowance to be made for cornices, openings or partitions. [14]

4. What amount will be due July 1st, 1892, on a note of $80, drawn February 6th, 1892, and bearing interest at $5\frac{1}{4}$ per cent. per annum? [14]

5. What is the smallest sum of money with which you can buy chickens at 25c., or geese at 50c., or turkeys at 75c., or lambs at $3, or sheep at $5, or pigs at $7, or cows at $35, or horses at $140, and have exactly $15 left for expenses? [14]

6. A farmer agreed to pay his hired man ten sheep and $160 for one year's labour. The man quit work at the end of seven months, receiving the sheep and $60 as a fair settlement. Find the value of each sheep. [14]

7. What decimal must be taken from the sum of $69\frac{1}{6}$, 8.2, 5.445, .065 and $20\frac{1}{12}$, so that it will contain 6.05 an exact number of times? [14]

8. A lad earned $21.16 collecting accounts for a physician. He was allowed $5\frac{3}{4}$ per cent.; what amount did he collect? [14]

9. S. S. No. 5, Esquesing, is assessed for $150,000. The trustees have built a school-house costing $1,800.

(*a*) What will the school-house cost a ratepayer whose property is assessed for $4,500?

(*b*) What would be the rate of taxation per annum on the whole section if the house were paid for in six equal annual payments, without interest? [14]

AGRICULTURE.

NOTE.—Only five questions are to be attempted. A maximum of five marks may be added for neatness.

1. What trees are most suitable for shade; for protection as windbreaks; for adornment? [15]

2. By means of what agencies is rock changed into soil? Describe the part each agent takes in this change. [15]

3. How should exhausted soil be treated, so as to restore its fertility? [15]

4. Explain the terms: tillage, plant food, heavy soils, humus, general manure, trenching. [15]

5. Under the following heads, tell what you know of underdrainage: materials used, depth of the drain, distance apart of the drains, cutting the trench, refilling the trench. [15]

6. Tell as many of the benefits as you can, arising from the rotation of crops. [15]

DRAWING.

Examiners: Isaac Day, Ph.B.; J. S. Deacon.

NOTE.—Only four questions are to be attempted.

1. Draw an axe, with the handle leaning against a wall, the figure to be six inches in height. [7]

2. Draw a table lamp, five inches in height. [7]

3. Draw the wheel of a waggon with sixteen spokes, drawing to be three inches in diameter. [7]

4. Draw a trunk three feet long, twenty inches wide, and twenty inches high, with the lid partly open; size of drawing one-half inch to a foot. [7]

5. Draw two oblique lines, one inch apart and five inches in length; divide each into five equal parts; join each point of division of the one line with the three nearest points of division of the other. [7]

6. Draw a watering-can, below the line of sight, two inches in height. [7]