ARITHMETIC.

Examiners : Clarke Moses,

J. Dearness.

NOTE.—Candidates are to take the first question and any six others.

1. Make out in proper form and find the amount of the following bill :

June 1st, 1894. G. Murray & Co. sold to John Scott, Toronto, 4886 bus. 36 lbs. wheat, at 58c. a bus.; 4532 lbs. peas, at 52c. a bus.; 38 lbs. 3 pks. barley, at 54c. a bus.; 465 lbs. flour, at \$1.50 a cwt.; 4685 lbs. bran, at \$15 a ton. Write out a receipt in full for payment of account, 26th June. $$2917.95_{3}^{1}6$ (13+3)

2. The weight of a cubic foot of water is $62\frac{1}{2}$ lbs, and an imperial gallon contains 277.274 cubic inches, find the weight in ounces of a pint of water. $20\frac{39}{3}\frac{7}{2}$ oz. (14)

3. The Manufacturers and Liberal Arts Building of the Columbian Fair was in the form of a rectangle and covered an area of 30 acres, 76 rods, 19 yds., 7 feet. The building was 787 feet wide. How many feet in length was it? 1687 ft. (14)

4. How many oranges must a boy buy and sell to make a profit of 9.30, if he buys at the rate of 5 for 3 cents and sells at the rate of 4 for 3 cents ? 6200. (14)

5. A sells goods to B at a gain of 12% and B sells the same goods to C at a gain of $7\frac{1}{2}\%$; C paid \$3762.50 for the goods. How much did A pay for them? \$3125. (14)

6. A gravel-bed whose surface has an area of 4 acres contains gravel to an average depth of 6 feet. How many miles of road 11 feet wide can be covered from the gravel in the bed, if it be spread on to a uniform depth of 8 inches? 27 miles. (14)

7. On the 15th October, 1893, a young man deposited in the Savings Bank the sum of \$86075. On the 20th May, 1894, he withdrew the principal and simple interest at 4% per annum. What amount did he withdraw? \$881.22. (14)

8. A man spent $\frac{1}{29}$ of his money for a house, $\frac{3}{7}$ of the remainder for cattle, and the rest for a farm. If the farm cost him $\frac{3}{357}$ less than the house and cattle together, what did he pay for all? $\frac{2}{2261}$. (14)

9 (a) Simplify

$\frac{5}{13} - (\frac{3}{7} \text{ of } \frac{1}{2})$	$(\frac{1}{3} \text{ of } \frac{1}{2}) + (1\frac{1}{2} \text{ of } 5)$
$r_{q}^{b} + (r_{1}^{7} \text{ of } 3\frac{1}{2}) - \frac{1}{2}$	<u>918-13</u>
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(b) Multiply 350.4 by .0105 and divide the product by .0000219. 3.6792; 168000. (8+6)

Example of special constructions or idioms.

1. Infinitives with a subject and sometimes a predicate objective :

I believe him to be a good scholar. I feel it to be an honor. I know her to be the author of it. I supposed him to be a foreigner. I have known him to be an hour late. He wanted us to wait for him. It is time for us to start. There is no necessity for him to do that. He was anxious for her to see it. His idea was for us to go by boat. Whom do you imagine to be the writer of it?

2. Complex verb phrases :

The fort was at once taken possesion of. This fact must not be lost sight of. Another method may be made use of. You will only be made fun of. It should not have been taken notice of. The difficulty has been got rid of. I was found fault with. It's a pity he could not have been got a hold of sooner. He was made a present of a gold watch. To