

8. Criticize and correct the following sentences : (a.) Evidently she would have preferred for the present that they should come to her rather than that she should go back to them. (b.) Do not trouble yourself about writing to me, except you are quite in the humour for it. (c.) Vico observes that the wife bringing a dowry is evidence of her freedom. (d.) Vested with a dignity which humanity has never possessed in any other person, this aggravation in his case was unparalleled.

9. Analyse grammatically and criticize the following passage, adding notes on parsing wherever you think fit : "My teachers," says he, "were hide-bound Pedants, without knowledge of man's nature, or of boy's ; or of aught save their lexicons and quarterly account-books. Innumerable dead Vocables (no dead Language, for they themselves knew no Language) they crammed into us, and called it fostering the growth of mind. How can an inanimate, mechanical Gerund-grinder, the like of whom will, in a subsequent century, be manufactured at Nürnberg out of wood and leather, foster the growth of anything ; much more of Mind, which grows, not like a vegetable (by having its roots littered with etymological compost), but like a spirit, by mysterious contact of Spirit ; Thought kindling itself at the fire of living Thought ?"—(CARLYLE.)

Arithmetic.—For Class D. Time Allowed : 3 hours.

1. A newspaper has been issued every day except Sundays since it began to be published, and has been numbered with consecutive numbers on each succeeding day : supposing that its issue on 1st January, 1889, is numbered 1562, find the date of its first publication.

2. Simplify $\frac{3\frac{5}{2} - 2\frac{3}{4} + 14\frac{3}{8}}{2 \cdot 19 \times 122} + \frac{4 \cdot 08 - 3\frac{1}{2}}{3 \cdot 15 + 2 \cdot 236}$.

3. Calculate, correct to five places of decimals, the value of $4(\frac{1}{5} - \frac{1}{3} \text{ of } \frac{1}{5} + \frac{1}{5} \text{ of } \frac{1}{5} - \frac{1}{7} \text{ of } \frac{1}{5} + \&c.) - (\frac{1}{2\frac{1}{3}} - \frac{1}{3} \cdot \frac{1}{2\frac{1}{3}} + \&c.)$.

4. If a cubic foot of water weigh 1,000oz. av., and a gallon of water weigh 10lb., find the number of cubic inches in a gallon.

5. With the data of the previous question find the depth of a 400-gallon tank which is 4ft. 5in. long and 3ft. 4in. wide. What is the weight of the water it will contain ?

6. In a company there are 56,169 shares, and each shareholder holds as many shares as there are shareholders : how many shareholders are there ?

7. A man has £12,200 invested on mortgage at $6\frac{1}{2}$ per cent., and, after paying out of the income property-tax on the capital, there remains £761 4s. 7d. a year : calculate the property-tax in pence per pound.

8. Find the true discount on £400 due 159 days hence, at 7 per cent. simple interest.

9. If in four years £10,000 amounted to £12,155 1s. 3d. when invested at compound interest, find the rate per cent.

10. A father dying leaves £15,000 to be divided amongst his three sons, A, B, and C ; B is to receive 25 per cent. more than C, and A 20 per cent. more than B : how much does each get ?

11. If seven geese are worth as much as five turkeys, five ducks worth as much as two geese, and four ducks worth as much as five chickens, find the value of a turkey when chickens are sold at 2s. 4d. each.

12. A man climbs a pole 35ft. high ; the first 24ft. he climbs at the rate of 3ft. in two seconds ; then, becoming tired, he climbs 1ft. and slides down 8in. in alternate seconds : how long does it take him to reach the top ?

13. Two people have a kilderkin (18 gallons) of ale, and they lose by leakage, &c., 0017857142 of a gallon a day ; one drinks half as much again as the other, and the ale lasts exactly fifty-six days : how much does each drink daily ?

14. Two clocks are set right at noon on 1st January, 1889 ; one loses ten seconds in twenty-four hours, and the other gains fifteen seconds in the same time : what will be the true time when they are half an hour apart, and what time will each clock show ?

Arithmetic.—For Class E and Junior Civil Service. Time allowed : 3 hours.

[The working must be shown for each Question.]

1. Divide 2,914,004,001 by 168 in three factors. Explain the method of finding the correct remainder.

2. What is the meaning of *measure* and of *multiple* in arithmetic ? Find the G.C.M. and L.C.M. of 176 and 1,000.

3. What is the rent of 29 acres 3 roods 28 perches at £2 3s. 6d. per acre ?

4. In a bankrupt's estate the assets are £1,560 17s. 6d., and the liabilities £3,200 6s. 8d. : what ought a creditor to receive on a debt amounting to £1,000 ?

5. A room is $60\frac{1}{2}$ ft. long, 33ft. broad, and 12ft. high : how many planks will floor it, if each plank be 22ft. long and 9in. broad ? What will it cost to paper the walls at $6\frac{3}{4}$ d. per square yard, allowing for two doors each 7ft. high and 4ft. broad, and four windows each 6ft. high and 4ft. broad ?

6. Simplify $\frac{1\frac{2}{3}}{3 + \frac{1}{3}} + \frac{1\frac{2}{3} \text{ of } 4\frac{2}{3}}{1\frac{2}{3} \text{ of } 3\frac{2}{3}}$, and $3\frac{1}{2} \text{ of } 5\frac{1}{6} + \frac{2}{3} (6\frac{1}{4} - 2\frac{1}{2}) - \frac{2\frac{1}{6}}{\frac{2}{3}}$.

7. Show how to convert a mixed circulating decimal into a vulgar fraction. Multiply $5 \cdot 8\dot{1}$ by $458\dot{3}$, and divide $1 \cdot 1\dot{3}$ by $\cdot 00013\dot{2}$.

8. Find the value of $\frac{1}{3}$ of $2\frac{1}{3}$ of 5s. 3d. + $5 \cdot 00625$ of £1 + $\cdot 06\dot{3}$ of 100 guineas - $3 \cdot 20953\dot{2}8$ of 17s. 6d.