LOWER DIVISION CLERK - EXAMINATION 2023
FOOD, CIVIL SUPPLIES & CONSUMER AFFAIRS DEPARTMENT

PAPER - II (Simple Arithmetic)
Full Mark - 50 Marks

A

CHOOSE THE CORRECT ANSWER OF THE FOLLOWING QUESTIONS : (25 x 2m)

1. Which is meaningless?
   (a) XV   (b) XIX   (c) IXIV   (d) XXIV

2. If the two graphs lines have no solutions, the graphs lines are
   (a) intersect at a point   (b) parallel   (c) coincide   (d) intersect at two points

3. What is the value of $\sqrt{540 - \sqrt{114 + \sqrt{50 - 1}}}$
   (a) 23   (b) 21   (c) 19   (d) 17

4. The average of 7 consecutive numbers is 20. What is the largest of these numbers?
   (a) 17   (b) 19   (c) 21   (d) 23

5. The marked price of a ceiling fan is Rs 720. During off season, it is sold for Rs. 684. Determine the discount percent.
   (a) 4%   (b) 6%   (c) 5%   (d) 5.26%

6. A garden has 3850 trees. 31% of these are mango trees 43% lemon and the rest are orange trees. Find the number of orange trees.
   (a) 1309   (b) 1001   (c) 1386   (d) 1011

7. A television and a washing machine were sold for Rs 9900 each. If the television was sold at a gain of 10% and the washing machine at a loss of 10%. Find the overall profit% or loss% on the entire transaction?
   (a) No gain no loss   (b) 1% gain   (c) 1% loss   (d) 10% gain

8. In a 60 littre mixture of milk and water, the ratio of milk to water is 2:1. How many liters of water is to be added to this, to make the ratio 1:2 in the new mixture?
   (a) 60 littres   (b) 40 littres   (c) 20 littres   (d) 10 littres

9. A started a business and he invested in 38000, After some month, B came to join with him and invest 28500. The end of the year the total profit was divided among them into ratio form 16: 8. Find after how many months did B join.
   (a) 5 months   (b) 3 months   (c) 2 months   (d) 4 months

10. A certain number of men can complete a piece of work in 180 days. If there are 30 men less, it will take 20 days more for the work to be completed. How many men were there originally?
    (a) 250   (b) 330   (c) 300   (d) 200

11. A can do a piece of work in 8 days and B in 12 days. B work for 6 days and left the job. If the remaining work was done by A, find the total time taken by them
    (a) 10 days   (b) 3 days   (c) 4 days   (d) 5 days

12. The average speed of a tractor is two-fifth the average speed of a car. The car covers 450 km in 6 hours. How much distance will the tractor cover in 8hours?
    (a) 480 km   (b) 420 km   (c) 240 km   (d) 210 km

13. The simple interest on Rs 3600 in 3 years at 5% per annum is
    (a) Rs 540   (b) Rs 550   (c) Rs 560   (d) Rs 600

14. Compute the compound interest on Rs. 16000 for 1 year 6 months at 10% per annum when compounded half yearly.
    (a) 18225   (b) 19522   (c) 18552   (d) 18522

15. A hemisphere, a cone, and a cylinder stand on equal bases and have the same height. The ratio of their volumes is
    (a) 3 : 4 : 5   (b) 2 : 1 : 3   (c) 2 : 5 : 7   (d) 1 : 3 : 2

16. The volume of a box is 13400 cm³. The area of its base is 670 cm². Find the height of the box.
    (a) 20cm   (b) 2cm   (c) 10cm   (d) 15cm

17. Find the number of permutations of the letters of the word MIZORAM
    (a) 2250   (b) 2520   (c) 2550   (d) 5220

18. A vertical tower stands on a horizontal plane and is surmounted by a vertical flagstaff of height h. At a point on the plane, the angles of elevation of the bottom and top of the flagstaff are α and β respectively. Prove that the height of the tower is

    (a) $\dfrac{h \tan \alpha}{\tan a - \tan \beta}$ (b) $\dfrac{\beta \tan h}{\tan \beta - \tan \alpha}$ (c) $\dfrac{h \tan \alpha}{\tan \beta - \tan \alpha}$ (d) $\dfrac{h \tan \beta}{\tan \beta - \tan \alpha}$

19. In the given figure, the pie-chart shows the expenditure incurred by a publisher in bringing out a book. If a book costs Rs 540 to the publisher, the expenditure spent on Printing is
    (a) Rs 36   (b) Rs 54
    (c) Rs 72   (d) Rs 108

20. Evaluate : $\sqrt[3]{\dfrac{0.343 \times 125}{0.000064}}$

    (a) 87.5   (b) 875   (c) 8.75   (d) 8750

21. Find the value of x : $5x - 2(2x - 7) = 2(3x - 1) + \dfrac{7}{2}$

    (a) 25   (b) 2.5   (c) 3.2   (d) 32

22. A number is 84 more than twice 25% of it. The number is
    (a) 168   (b) 156   (c) 148   (d) 94

23. Which of the following is the second greatest?
    (a) 10% of 600   (b) 70% of 100   (c) 30% of 300   (d) 20% of 400

24. Divide Rs. 1440 among A, B, and C such that C gets 1/3 of what B gets and A gets 4/5 of what C gets. Find the share of A
    (a) Rs 480   (b) Rs 300   (c) Rs 420   (d) Rs 240

25. In the given four years bar graphs shown, total number of boys was

    (a) 2720
    (b) 2820
    (c) 2870
    (d) 2770

Scale: On Y-axis, 1 cm = 100 students

Boys: 2014 = 6, 2015 = 6.8, 2016 = 7.6, 2017 = 8.3
Girls: 2014 = 4.7, 2015 = 5.9, 2016 = 6.9, 2017 = 9.7