

**ENRICH BEYOND CLASS ROOM
SESSION -2**

Mathematics

M.M: 25
1 Hour

1. In an examination, a student was asked to find $\frac{3}{14}$ of a certain number. By mistake he found $\frac{3}{4}$ of that number. His answer was 150 more than the correct answer. then the number is_____. (1)
- i) 210 ii) 230 iii) 280 iv) 310
2. Nine bus stops are equally spaced along a bus route. The distance from first to third is 600 metre. What is the distance between first to the last stop? (1)
- i) 1600 m ii) 2400 m iii) 2700 m iv) 1800 m
3. If P can run 100 m in 20 seconds and Q, in 25 sec. Then P beats Q by_____ (1)
- i) 10 m ii) 20 m iii) 25 m iv) 12 m
4. Divide ₹ 181 among A , B and C so that B may get ₹ 7 more than A and C gets ₹ 6 less than twice A's share, then shares of each are_____ (1)
- i) A = ₹ 40 B = ₹ 57 C = ₹ 84
ii) A = ₹ 45 B = ₹ 52 C = ₹ 84
iii) A = ₹ 52 B = ₹ 45 C = ₹ 84
iv) None of these
5. What percent of THIS and THAT plus THAT and THIS is THIS and THAT? (1)
- i) 50% ii) 70% iii) 90% iv) 100%
6. Which of the following has the least value? (1)
- i) $1^0 - 0^1$ ii) $2^1 - 1^2$ iii) $3^2 - 2^3$ iv) $4^3 - 3^4$
7. If the average of x and y is 60 and the average of y and z is 80, what is the value of $z - x$? (1)

- i) 60 ii) 50 iii) 40 iv) 280

8. A rectangular sheet of paper $44\text{cm} \times 18\text{ cm}$ is rolled along its length and a cylinder is formed. The volume of the cylinder is ----- (Use $\pi = \frac{22}{7}$) .
i) 441 cm^3 ii) 2741 cm^3 iii) 281 cm^3 iv) 2772 cm^3 (1)
9. X is 15 years old. Y is one third older. How many years ago was Y twice as old as X?
i) 3 ii) 12 iii) 10 iv) 6 (1)
10. A milk man can purchase either 4 buffaloes and 3 cows or 3 buffaloes and 6 cows for ₹ 21000. What is the cost of one cow?
i) ₹ 1500 ii) ₹ 2800 iii) ₹ 1000 iv) ₹ 1400 (1)
11. A piece of wire is shaped to enclose a square, whose area is 121 cm^2 . It is then re-shaped to enclose a rectangle whose length is 13 cm. The area of the rectangle is _____ cm^2
i) 78 ii) 96 iii) 137 iv) 117 (1)
12. Which one among the following is wrong?
i) 525252 is multiple of 3
ii) 525525 is multiple of 7
iii) unit place of 72^5 is 5
iv) Unit place in the product 525×525 is 5. (1)
13. The 25th term in the sequence (1, 2), (2, 3), (3, 5), (4, 7), (5, 11), (6, 13),..... is_____.
i) (25, 97) ii) (25, 49) iii) (25, 37) iv) (25, 47) (1)
14. If $4^{44} + 4^{44} + 4^{44} + 4^{44} = 4^x$ then $x =$ _____
i) 46 ii) 44 iii) 48 iv) 45 (1)
15. $\frac{4}{5}$ of a number exceeds its $\frac{2}{3}$ by 8. The number is_____ (1)
i) 50 ii) 60 iii) 70 iv) 65
16. If the sum of two consecutive odd numbers is 2004, then the smaller of the two numbers could be _____. (1)
i) 1001 ii) 1003 iii) 999 iv) 1005

17. How many times will the wheel of a car rotates in a journey of 88 km if it is known that the diameter of the wheel is 56 cm. (Use $\pi = \frac{22}{7}$) (1)
 i) 60,000 ii) 40000 iii) 45000 iv) 50000
18. If x is $\frac{5}{7}$ of 490, then $\frac{5}{7}$ of x is _____. (1)
 i) 350 ii) 70 iii) 420 iv) 250
19. 8 % of 2500 + 37 % of P = 348, find the value of P. (1)
 i) 300 ii) 600 iii) 400 iv) None of these
20. If a certain number is subtracted from the numerator and added to the denominator of $\frac{9}{19}$ the new fraction is equivalent to $\frac{1}{3}$. Find the number. (1)
 i) 1 ii) 2 iii) 3 iv) none of these
21. Find the value of k if the point P (0, 2) is equidistant from A (3, k) and B (k, 5). (1)
 i) 3 ii) 2 iii) 1 iv) 5
22. If the median of the following data, arranged in ascending order, is 42. Then x = (1)
22, 23, 33, 37, x + 1, x + 3, 44, 48, 51, 58
 i) 38 ii) 39 iii) 41 iv) 40
23. Equation of line which is parallel to x – axis and passing through the point (0, –3) is _____. (1)
 i) $x + y = -3$ ii) $x = 3$ iii) $y = -3$ iv) $y = 3$
24. The sum of a two digit number and the number obtained by reversing its digits is 121. If the digits differ by 3, find the number. (1)
 i) 47 ii) 57 iii) 67 iv) 77
25. If $P(A) = 2p + 3q$ and $P(\text{not } A) = 3p + 2q$, find the value of $p + q$. (1)
 i) $\frac{3}{7}$ ii) $\frac{1}{5}$ iii) $\frac{2}{7}$ iv) $\frac{2}{5}$