

# Model Test Paper-I

(Based on Chapters 1 to 9)

## SECTION - A

[11 × 2 = 22]

1. Multiply  $64 \times 105$  using distributive property.
2. Ramu was eating a cake. He had eaten one-fourth of the cake, when his three friends joined. He divided the remaining cake equally and gave them. What fraction of the cake did each friend get?
3. What should be added to  $\frac{-3}{4}$  to get  $\frac{1}{2}$  ?
4. Multiple 12. 345 by 27.
5. Express  $\frac{-243}{32}$  in power notation.
6. If  $x = -2$  and  $y = 3$ , find the value of  $3x^2 - y^3 + 4$ .
7. The sum of three consecutive numbers is 45. Find the numbers.
8. The cost of 15 m cotton cloth is ₹ 1875. Find the cost of 8 m cloth.
9. Find the number whose  $3\frac{1}{8}\%$  is 500.
10. If the profit made on a packet of toothpaste is ₹ 7 and the cost price of the packet is ₹ 35, then how much is the profit percentage?
11. Priya borrowed ₹ 1250 from her friend at the rate of 5% per annum for 3 years. Find the amount paid by her after 3 years.

## SECTION - B

[10 × 3 = 30]

12. Find the difference between the sum of odd numbers and sum of even numbers between 20 and 30.
13. Represent  $\frac{-4}{3}$  and  $\frac{4}{3}$  on a number line.
14. Arrange  $\frac{-4}{3}, \frac{-3}{4}, 1, \frac{2}{3}, \frac{4}{3}, \frac{5}{6}$  in descending order.
15. If  $x$  is a rational number and  $p, q$  and  $r$  are all different integers, then prove that  $\frac{x^p}{x^q} \times \frac{x^q}{x^r} \times \frac{x^r}{x^p} = 1$ .
16. If  $A = 7x^4 + 5x^3 - 2x^2 - 17$ ,  $B = 6x^3 + 5x^2 - 5$  and  $C = 2x^4 - 6x^3 + 3x^2$ , find  $(A - B) + C$ .
17. The numerator of a fraction is 5 less than the denominator. If 3 is added to both its numerator and denominator, it becomes  $\frac{1}{2}$ . Find the fraction.
18. In an organization there are 80 employees, out of which 36 are female. Find the ratio of
  - (a) Male to female
  - (b) Female to total employees
  - (c) Male to total employees.



19. Mannu bought a second hand mobile for ₹ 3600 and spent ₹ 1200 on its repairs. If he sold it for ₹ 5000, what was his profit or loss %?
20. In how many years will a sum of money doubles itself at 12% per annum.
21. In an examination 85% of the candidates passed and 45 candidates failed. How many students appeared in the examination ?

### SECTION - A

[7 × 4 = 28]

22. In a competitive examination paper consisting of 100 questions, 4 marks are awarded for each correct answer, 1 mark deducted for each incorrect answer and no mark added or deducted for not attempted questions.
- (a) Arunoday attempted 80 questions. If only 64 are correct, what is his score?
- (b) For a candidate to qualify he must get 280 marks. Arnav attempted 75 question, out of which 15 are incorrect. Will he pass or not ?

23. Solve for 'x' verify the solution also.

$$\frac{x+3}{4} - \frac{3x+5}{6} = \frac{4x+3}{5}$$

24. Abdulla bought 1800 balls at ₹ 8 a dozen. He sold 1200 of them at ₹1 each ball and rest at ₹10 a dozen. Find his gain or loss per cent.
25. There are three prizes to be distributed in a quiz contest. The value of second prize is five-sixth of the value of first prize and the value of third prize is four-fifth of second prize. If the total value of three prizes is ₹ 2625, find the value of each prize.
26. A bag contains 25 paise and 50 paise coins whose total value is ₹45. If the number of 25 paise coins is four times that of 50 paise coins, find the number of each type of coins.
27. Pandey borrowed ₹ 125000 from a money lender for 3 years. He returned ₹ 75000 at the interest rate of 8% and the remaining amount at 12%. How much interest did he pay in 3 years?