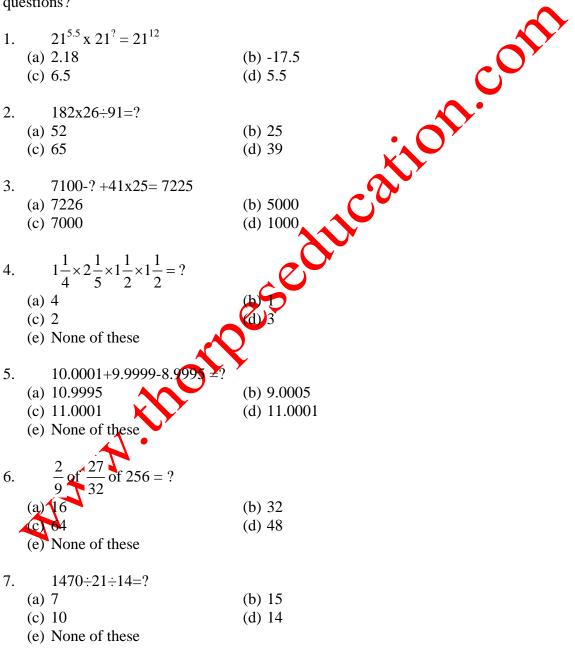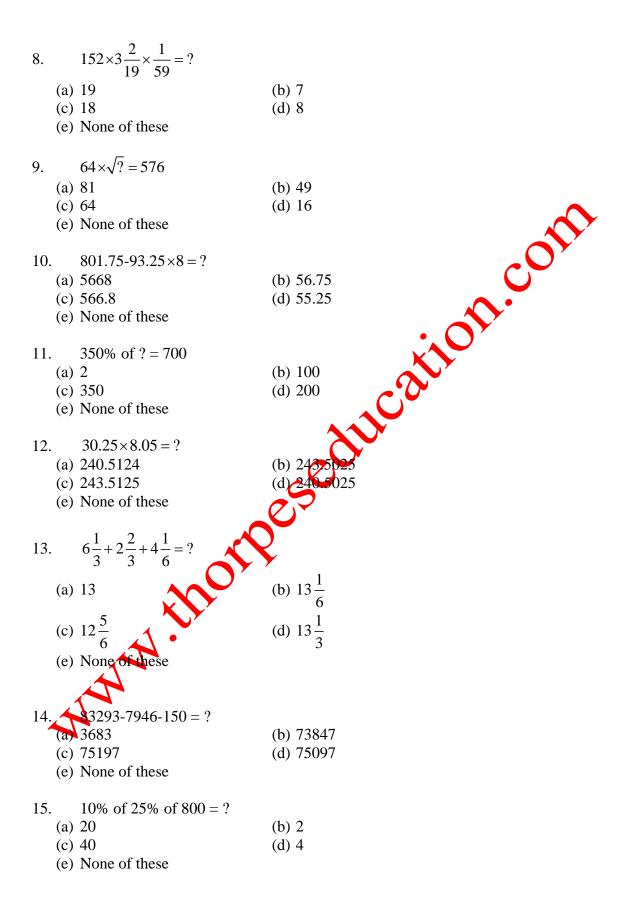# PRACTICE TEST PAPER NO. 4
Mathematical Ability

Directions – (Q.1-25) what will come in place of the question mark (?) in the following questions?

1. $21^{5.5} \times 21^? = 21^{12}$
   (a) 2.18   (b) -17.5
   (c) 6.5   (d) 5.5

2. $182 \times 26 \div 91 = ?$
   (a) 52   (b) 25
   (c) 65   (d) 39

3. $7100 - ? + 41 \times 25 = 7225$
   (a) 7226   (b) 5000
   (c) 7000   (d) 1000

4. $1\frac{1}{4} \times 2\frac{1}{5} \times 1\frac{1}{2} \times 1\frac{1}{2} = ?$
   (a) 4   (b) 1
   (c) 2   (d) 3
   (e) None of these

5. $10.0001 + 9.9999 - 8.9995 = ?$
   (a) 10.9995   (b) 9.0005
   (c) 11.0001   (d) 11.0001
   (e) None of these

6. $\frac{2}{9}$ of $\frac{27}{32}$ of $256 = ?$
   (a) 16   (b) 32
   (c) 64   (d) 48
   (e) None of these

7. $1470 \div 21 \div 14 = ?$
   (a) 7   (b) 15
   (c) 10   (d) 14
   (e) None of these

8. $152 \times 3\dfrac{2}{19} \times \dfrac{1}{59} = ?$

   (a) 19   (b) 7
   (c) 18   (d) 8
   (e) None of these

9. $64 \times \sqrt{?} = 576$

   (a) 81   (b) 49
   (c) 64   (d) 16
   (e) None of these

10. $801.75 - 93.25 \times 8 = ?$

   (a) 5668   (b) 56.75
   (c) 566.8   (d) 55.25
   (e) None of these

11. 350% of ? = 700

   (a) 2   (b) 100
   (c) 350   (d) 200
   (e) None of these

12. $30.25 \times 8.05 = ?$

   (a) 240.5124   (b) 243.5025
   (c) 243.5125   (d) 240.5025
   (e) None of these

13. $6\dfrac{1}{3} + 2\dfrac{2}{3} + 4\dfrac{1}{6} = ?$

   (a) 13   (b) $13\dfrac{1}{6}$

   (c) $12\dfrac{5}{6}$ (d) $13\dfrac{1}{3}$

   (e) None of these

14. $83293 - 7946 - 150 = ?$

   (a) 3683   (b) 73847
   (c) 75197   (d) 75097
   (e) None of these

15. 10% of 25% of 800 = ?

   (a) 20   (b) 2
   (c) 40   (d) 4
   (e) None of these

16. $\dfrac{\sqrt{36} \times 3 - 5 \times 7}{-4 \times \sqrt{289}} = ?$

    (a) $\dfrac{1}{2}$ (b) $\dfrac{1}{8}$

    (c) $\dfrac{3}{4}$ (d) 1

    (e) None of these

17. $57.75 \div 7 = ?\%$ of 20
    (a) 35.25   (b) 40.25
    (c) 42.25   (d) 41.25
    (e) None of these

18. $42 \times 18 - 14^2 = ?$
    (a) 568   (b) 676
    (c) 576   (d) 560
    (e) None of these

19. $19.30 \times 1.7 + 13.46 = ?$
    (a) 46.72   (b) 46.27
    (c) 292.588   (d) 46.77
    (e) None of these

20. $5625 \div 75 + \sqrt{?} = ?$
    (a) 441   (b) 400
    (c) 361   (d) 484
    (e) None of these

21. 25% of 980 + ?% of 355 = 529
    (a) 80   (b) 65
    (c) 70   (d) 75
    (e) None of these

22. $18^2 \div 81 \times 27 = ?$
    (a) 81   (b) 54
    (c) 108   (d) 162
    (e) None of these

23. $2\dfrac{2}{3} \times 4\dfrac{5}{6} + ? = 14$

    (a) $2\dfrac{1}{3}$ (b) $1\dfrac{1}{6}$

    (c) $2\dfrac{1}{9}$ (d) $1\dfrac{1}{9}$

(e) None of these

24. $33\frac{1}{3}$% of 1260 + 80% of 755 = ?
   (a) 976   (b) 1024
   (c) 1048   (d) 952
   (e) None of these

25. $(0.25)^2 + (0.15)^2 = ?$
   (a) 0.0085   (b) 0.8
   (c) 0.085   (d) 0.625
   (e) None of these

26. The amount of simple interest accrued on a principal amount of Rs. 25,000 in 7 years is Rs. 21,000. What is the rate of interest p.c.p.a.?
   (a) 15   (b) 10
   (c) 18   (d) 20
   (e) None of these

27. Inlet '1' and '2' together can fill a tank in 18 hours. Inlet '2' can fill the tank on its own in 24 hours. In how many hours can inlet '1' alone fill the tank?
   (a) 48 hrs.   (b) 72 hrs.
   (c) 60 hrs.   (d) 84 hrs.
   (e) None of these

28. What will come in place of the question mark (?) in the following number series?
   $1\frac{1}{3}$, 3, $4\frac{2}{3}$, ?, 8
   (a) $6\frac{2}{3}$ (b) $7\frac{1}{3}$
   (c) $6\frac{1}{3}$ (d) $5\frac{2}{3}$
   (e) None of these

29. If the length of a rectangular field is 48 meters more than its breadth and the perimeter of the field is 800 meters, what is the area of the field in square meters?
   (a) 39424   (b) 40000
   (c) 31376   (d) Cannot be determined
   (e) None of these

30. If the numerator and denominator of a fraction are increased by $33\frac{1}{3}$% and $66\frac{2}{3}$% respectively, the fraction becomes $\frac{36}{35}$, what was the original fraction?

(a) $\dfrac{21}{27}$ (b) $\dfrac{28}{27}$

(c) $\dfrac{27}{14}$ (d) $\dfrac{22}{7}$

(e) None of these

31. In a class of 72 children, children are seated in rows and columns in such a way that the number of children in each row is 12.5% more than the number of children in each column. How many children are these in each row?
   (a) 8   (b) 9
   (c) 12   (d) 18
   (e) None of these

32. In the following number series, only one number is wrong. Find out that wrong number.
   1, 2, 2, 4, 8, 64, 256
   (a) 4   (b) 8
   (c) 64   (d) 256
   (e) None of these

33. The perimeter of a square and a rectangle is the same. If the rectangle is 12 cms. by 10 cms., then by what percentage is the area of square more than that of the rectangle?

   (a) 1   (b) $1\dfrac{1}{6}$

   (c) $1\dfrac{1}{3}$ (d) $\dfrac{2}{3}$

   (e) None of these

34. What will be the compound interest earned on an amount of Rs. 8,000 @20% p.a. in two years?
   (a) Rs. 10,520   (b) Rs. 11,240
   (c) Rs. 10,360   (d) Rs. 11,080
   (e) None of these

35. Mr. Ahuja gave 30% of his money to his wife, half of the remaining to his daughter and the rest was to distributed among his five sons equally. If each son received Rs.14,000, what was the total amount he had?
   (a) Rs. 2, 00,000   (b) Rs. 10,000
   (c) Rs. 1,75,000   (d) Cannot be determined
   (e) None of these

36. If the following fractions are arranged in the ascending order of their values, which one will be the fourth from the top?

$$\frac{8}{9}, \frac{9}{12}, \frac{7}{8}, \frac{5}{6}, \frac{17}{20}$$

(a) $\dfrac{8}{9}$ (b) $\dfrac{17}{20}$

(c) $\dfrac{5}{6}$ (d) $\dfrac{7}{8}$

(e) $\dfrac{9}{12}$

37. How much time will a 270 meter long train running at a speed of 360 meters per second take to cross a platform of equal length?
    (a) 1.5 seconds   (b) 1.2 seconds
    (c) 1.8 seconds   (d) 2.1 seconds
    (e) None of these

38. First class train fare from Banglore to Hyderabad is Rs. 7,415 and Second class train fare for the same is Rs. 5,932. What is the ratio of Second class to First class fare?
    (a) 5 : 16   (b) 4 : 33
    (c) 4 : 5   (d) 5 : 41
    (e) None of these

39. What will come in place of the question mark (?) in the following number series?
16, 24, 12, ?, 9, 13.5
    (a) 15   (b) 16
    (c) 21   (d) 18   (e) None of these

40. If the remainder obtained by subtracting a number from its own square is 4 times the number, what is the number?
    (a) 4   (b) 3
    (c) 6   (d) 7   (e) None of these

41. The sum of ages of members (children and their parents) of a family is 360 years. If the sum of the ages of the children in the family is 240 years, what is the ratio of the ages of the husband to the wife?
    (a) 3 : 2   (b) 2 : 3
    (c) 1 : 2   (d) Cannot be determined
    (e) None of these

42. When a person distributed sweets among a gathering of people, each person got 7 sweets and 14 sweets remained undistributed. If two more people had joined the gathering, no sweet would have remained undistributed. How many people had gathered?
    (a) 70   (b) 56
    (c) 63   (d) Cannot be determined
    (e) None of these

43. If $4x + 6y = 32$ and $4x - 2y = 4$, then what is the value of 8y?
   (a) 36   (b) 30
   (c) 24   (d) 42   (e) None of these

44. What **approximate** value will come in place of the question mark (?) in the following equation?
   $239.99 \div 8.0001 \times 9.99 = ?$
   (a) 240   (b) 300
   (c) 360   (d) 480   (e) 420

45. In the following number series only one number is **wrong**. Find out that **wrong** number.
   8, 13, 21, 32, 47, 63, 83
   (a) 21   (b) 63
   (c) 32   (d) 83   (e) 47

46. What is the circumference in centimeters of a circle whose are is 49π square centimeters?
   (a) 28π (b) 14π
   (c) 7π (d) 21π (e) None of these

47. The average of eight numbers taken together is 12. Two of these numbers are 0 and the remaining numbers are equal. What is the value of the non-zero number?
   (a) 16   (b) 12
   (c) 6   (d) 18   (e) None of these

48. A Compact Disc Player when sold for Rs. 13,600, incurred a loss of 15%. At what price should it have been be sold to make a profit of 35% on the cost?
   (a) Rs. 5,600   (b) Rs. 21,600
   (c) Rs. 20,400   (d) Rs. 4,800 (e) None of these

49. What will be the cost of tiling the floor @ Rs. 38 per square meter, if the hall is of a square shape and has a perimeter of 400 meters?
   (a) 19,000   (b) 57,000
   (c) 38,000   (d) 9,500   (e) None of these

50. London time is five and a half hours behind Delhi time. What time is it in London if it is 02:35 in Delhi?
   (a) 21:05   (b) 08:05
   (c) 21:35   (d) 07:05   (e) None of these

Answers

1.	(c)	11.	(d)	21.	(a)	31.	(b)	41.	(d)
2.	(a)	12.	(c)	22.	(c)	32.	(c)	42.	(d)
3.	(b)	13.	(b)	23.	(d)	33.	(e)	43.	(e)
4.	(e)	14.	(c)	24.	(b)	34.	(e)	44.	(b)
5.	(c)	15.	(a)	25.	(c)	35.	(a)	45.	(e)
6.	(d)	16.	(e)	26.	(e)	36.	(c)	46.	(b)
7.	(b)	17.	(d)	27.	(b)	37.	(a)	47.	(a)
8.	(d)	18.	(d)	28.	(c)	38.	(c)	48.	(b)
9.	(a)	19.	(b)	29.	(a)	39.	(d)	49.	(e)
10.	(e)	20.	(a)	30.	(e)	40.	(e)	50.	(b)