Directions (1–25) : *What should come in place of question mark (?) in the following questions ?*

1. $22.5 \times 32.4 \div 4.5 = ?$
   (a) 164   (b) 152
   (c) 156   (d) 166
   (e) None of these

2. $3352 \div 3331 \div 3109 \div 3456 = 28881 - ?$
   (a) 13748   (b) 15602
   (c) 13478   (d) 15662
   (e) None of these

3. $324 \times 149 = ?$
   (a) 47628   (b) 48276
   (c) 47978   (d) 48622
   (e) None of these

4. $3055 = 25 \times 3.4 + 125 = ?$
   (a) 520.50   (b) 418.28
   (c) 662.68   (d) 540.48
   (e) None of these

5. $75 \times \sqrt{841} + 15 = ?$
   (a) 135   (b) 145
   (c) 125   (d) 115
   (e) None of these

6. $\dfrac{19}{5032} \times \dfrac{34}{567} \times \dfrac{7}{296} = ?$
   (a) $\dfrac{5}{43808}$ (b) $\dfrac{1}{245}$
   (c) $\dfrac{2}{245}$ (d) $\dfrac{1}{74}$
   (e) None of these

7. $(63)^2 + (?)^2 \div 3^2 = 58$
   (a) 81   (b) 9
   (c) 6   (d) 36
   (e) None of these

8. $\dfrac{25 \times 90}{12\% \text{ of } 250} = ?$
   (a) 50   (b) 40
   (c) 70   (d) 45
   (e) None of these

9. $5452 + 1298 = ? \times 28$
   (a) 345   (b) 365
   (c) 355   (d) 325
   (e) None of these

10. $(5)^7 \div (35)^7 \times 125 = (5)^?$
    (a) 9   (b) 7

11. $(3750 - 2593) + 25 \times 6 = ?$
    (a) 7.80   (b) 280.80
    (c) 15.80   (d) 250.80
    (e) None of these

12. $\sqrt[3]{164} \times \sqrt{576} + (4)^2 = (?)^2$
    (a) 32   (b) 36
    (c) 28   (d) 24
    (e) None of these

13. 55 % of 560 - 28 % of ? = 229.6
    (a) 250   (b) 260
    (c) 300   (d) 320
    (e) None of these

14. $7^? + 6^? - 3^? - 113 = ?$
    (a) 175   (b) 185
    (c) 125   (d) 196
    (e) None of these

15. $3328 \times \sqrt[3]{?} = 256$
    (a) 2197   (b) 1728
    (c) 2744   (d) 729
    (e) None of these

16. $10^{-2} = ?$
    (a) 0.001   (b) 0.0001
    (c) 0.01   (d) 0.1
    (e) None of these

17. 15 % of ? = 94.5
    (a) 14.175   (b) 1410
    (c) 630   (d) 141
    (e) None of these

18. $\dfrac{15 \times 14 \div 4}{60 + 2 - 1 + 101} = ?$
    (a) 10   (b) 0
    (c) 12   (d) 11
    (e) None of these

19. $\dfrac{5}{9} \text{ of } \dfrac{2}{5} \text{ of } 992 = ?$
    (a) 388   (b) 390
    (c) 372   (d) 376
    (e) None of these

20. $12 \div 6 \div 0.8 = ?$
    (a) 25.625   (b) 23.545
    (c) 27.455   (d) 21.365
    (e) None of these

21. 47 % of 840 = ?

(a) 394.08   (b) 398.80
(c) 396.68   (d) 394.80
(e) None of these

24. $766.76 - 767.67 + 6776.67 = ?$
(a) 6776.76   (b) 6775.76
(c) 6766.66   (d) 6875.76
(e) None of these

25. $19 \times 11 - 21 + 444 + 37 = ? - 110$
(a) 310   (b) 200
(c) 210   (d) 190
(e) None of these

23. $23\frac{3}{9} + 1\frac{4}{9} + 7\frac{2}{9} = ?$
(a) $31\frac{1}{3}$ (b) $31\frac{1}{9}$
(c) $30\frac{4}{9}$ (d) $31\frac{8}{9}$
(e) None of these

25. $81^{?} \times 9^{?} + 3^{14} = 9^{?}$
(a) 3.7   (b) 9.4
(c) 4.7   (d) 4.9
(e) None of these

26. The ratio of the number of boys to the number of girls studying in a school is 25:29. The total number of students studying in school is 270. If 15 boys and 15 girls take admission in the school. What will be the new ratio of the boys and girls studying in the school ?
(a) 6:7   (b) 8:7
(c) 7:8   (d) 7:9
(e) None of these

27. The profit earned after selling a T-shirt for ₹ 575 is the same as the loss incurred after selling the same T-shirt for ₹ 295. What is the cost price of the T-shirt ?
(a) ₹ 525   (b) ₹ 465
(c) ₹ 435   (d) ₹ 450
(e) None of these

28. In a class of 125 students, 20% of the students can dance. 2/5 of total number of students in the class can sing and 2/5 of the remaining number of students in the class are good at sport. What is the ratio of the number of student who can dance to the number of students who are good at sports ?
(a) 5:4   (b) 4:3
(c) 5:3   (d) 4:2
(e) None of these

29. Archana took a loan of ₹ 50,600 at a certain rate of simple interest for 5 years. At the end of 5 years she repaid an amount of ₹ 65,780. What is the rate of interest at which Archana took the loan ?
(a) 5 pcpa   (b) 4 pcpa
(c) 8 pcpa   (d) 6 pcpa
(e) None of these

30. What should come in place of the question mark (?) in the following number series ?
3 5 13 43 177 ? 5353
(a) 891   (b) 713
(c) 885   (d) 899
(e) None of these

31. What approximate value should come in place of the question mark (?) in following question ?
$5040 \div 33 - 4 = ?$
(a) 115   (b) 102
(c) 120   (d) 108
(e) None of these

32. The population of a town two years ago was 45,000. It increased by 12% in the first year and decreased by 15% in the second year. What was the population of the town at the end of two years ?
(a) 57,690   (b) 42,840
(c) 44,820   (d) 50,400
(e) None of these

33. Find the average of the following set of scores.
157, 348, 443, 221, 360, 795, 841, 101,
(a) 443   (b) 368.50
(c) 395.25   (d) 348
(e) None of these

34. If an amount of ₹ 93,470 is distributed equally amongst 75 people, How much approximate amount would each person get ?
(a) ₹ 1,230   (b) ₹ 1,240
(c) ₹ 1,242   (d) ₹ 1,245
(e) None of these

35. Abhash scored a total of 455 marks out of 800 marks in an examination. What was his approximate percentage in the examination ?
(a) 60   (b) 52
(c) 64   (d) 57
(e) 57

Direction (36-37) : What approximate value should come in place of the question mark (?) in the following question ?

36. $\frac{2}{13} \times 3\frac{6}{19} + 4\frac{5}{7} = ?$
(a) 8   (b) 10
(c) 6   (d) 13
(e) 3

37. $3968 \div 28 \times (6)^2 + 410 = ?$
(a) 5800   (b) 5500
(c) 5400   (d) 5600
(e) 6100

38. Three men or eight boys can do a piece of work in 17 days. How many days will two men and six boys together take to finish the same work ?

(a) 9 days
(b) 11 days
(c) 14 days
(d) 12 days
(e) None of these

39. The cost price of an item is two-third of its selling price. What is the gain or loss per cent on that item ?

(a) 45
(b) 50
(c) 35
(d) 54
(e) None of these

40. The ratio between the present ages of Dheeraj and Raman is 2:3 respectively. Four years ago, the ratio between their ages was 5:8 respectively. What will be Dheeraj's age after 7 years ?

(a) 29 years
(b) 35 years
(c) 31 years
(d) 33 years
(e) 41 years

41. Sima earns a profit of 18% on selling an item for ₹ 1,416. What is the cost of the item ?

(a) ₹ 1,200
(b) ₹ 1,240
(c) ₹ 1,100
(d) ₹ 1,140
(e) None of these

42. What is the smallest number which when divided by 8,10 or 12 gives the remainder 5 ?

(a) 127
(b) 133
(c) 267
(d) 177
(e) None of these

43. Last year Raman planted 170 mango trees. He increased the number by 40% this year. How many mango trees will he plant this year ?

(a) 248
(b) 228
(c) 238
(d) 328
(e) None of these

44. The average marks of a student in seven subjects is 41. After re-evaluation in one subject the marks were changed to 42 from 14 and in remaining subjects the marks remained. What is the new average marks ?

(a) 45
(b) 44

(c) 46
(d) 47
(e) None of these

45. Six-seventh of a number is equal to the sum of $(3)^2$ and $(15)^2$ together. What is the number ?

(a) 273
(b) 263
(c) 234
(d) 242
(e) None of these

46. The cost of 20 folders and 15 pens is ₹ 995. What is the cost of 12 folders and 9 pens ?

(a) ₹ 612
(b) ₹ 597
(c) ₹ 447
(d) marks remain unchanged
(e) None of these

47. A sum of money is divided among A, B, C and D in the ratio of 4:6:11:13 respectively. If the share of C is ₹ 7854/-, then what is the total amount of money of B and D together ?

(a) ₹ 13,566
(b) ₹ 16,928
(c) ₹ 12,784
(d) ₹ 15,676
(e) None of these

48. A single person takes 6 minute to fill a bottle. If the machine starts at 11 a.m to 12.30 p.m, 1845 bottles are to be filled, how many person should be employed on this job ?

(a) 121
(b) 127
(c) 135
(d) 139
(e) None of these

49. If $x + y = 18$ and $xy = 72$. What is the value of $(x)^2 + (y)^2$?

(a) 120
(b) 90
(c) 180
(d) Cannot be determined
(e) None of these

50. In how many different ways can the letters of the word 'INHALE' be arranged.

(a) 720
(b) 360
(c) 120
(d) 650