SECTION 1 (Mental Maths Calculation)

1. $(29 \times 15) + (42 \times 51) =$ _____
(a) 2477   (b) 2577
(c) 2387   (d) 2587

2. $(97 \times 34) - (17 \times 83) =$ _____
(a) 1877   (b) 1787
(c) 1887   (d) 1777

3. $(13 \times 42) + (7 \times 8) + (21 \times 14) =$ _____
(a) 896   (b) 876
(c) 886   (d) 796

4. $(72 \times 5) + (83 \times 3) - (42 \times 4) =$ _____
(a) 441   (b) 331
(c) 341   (d) 301

5. $(83 \times 7) - (42 \times 4) + (12 \times 8) =$ _____
(a) 499   (b) 509
(c) 519   (d) 489

6. (25% of 240) + (50% of 812) = _____
(a) 446   (b) 456
(c) 566   (d) 466

7. (50% of 830) – (25% of 484) = _____
(a) 526   (b) 516
(c) 294   (d) 394

8. (50% of 184) + (25% of 712) – (20% of 190) = _____
(a) 318   (b) 298
(c) 288   (d) 232

9. (half of 234) + (one third of 534) = _____
(a) 285   (b) 275
(c) 295   (d) 305

10. (one third of 840) – (half of 298) = _____
(a) 121   (b) 141
(c) 131   (d) 231

11. square of 82 + square 44 = _____
(a) 8660   (b) 8550
(c) 8560   (d) 9660

12. square of 62 – square 41 = _____
(a) 2053   (b) 2163
(c) 2063   (d) 2153

13. square of 48 + square of 31 – square of 42 = _____
(a) 1481   (b) 1501
(c) 1511   (d) 1491

14. square of 19 – square root of 1296 = _____
(a) 235 (b) 225
(c) 325 (d) 315

15. square of 41 + cube root of 6859 = _____
(a) 1562 (b) 1662
(c) 1462 (d) 1552

16. square root of 361 + cube of 7 = _____
(a) 362 (b) 342
(c) 352 (d) 372

17. cube of 7 + square root 1444 =
(a) 381 (b) 371
(c) 343 (d) 362

18. Sum of all the divisor of 135 = _____
(a) 192 (b) 216
(c) 104 (d) 240

19. Sum of all the divisor of 42
(a) 96 (b) 83
(c) 79 (d) 53

20. Sum of all prime divisors of 3225
(a) 8 (b) 51
(c) 9 (d) 52

21. Select the greatest number from the given operations.
(a) 94 × 4 (b) 423 – 159
(c) 89 + 133 (d) 24 × 17

22. Select the smallest number from the given operations.
(a) 38 × 4 (b) 245 – 78
(c) 192 ÷ 3 (d) 6 × 14

23. If 431 is divided by 24, the remainder is _____
(a) 23 (b) 21
(c) 22 (d) 13

24. If 894 is divided by 14, the remainder is _____
(a) 13 (b) 10
(c) 11 (d) 12

25. If 1342 is divided by 23, the remainder is _____
(a) 8 (b) 9
(c) 7 (d) 6

26. If 2154 is divided by 32, the remainder is _____
(a) 9 (b) 11
(c) 10 (d) 8

27. 8425 × 31 = _____

(a) 261155   (b) 261175

(c) 260175   (d) 261075

28. 1128 × 43 = _____

(a) 48474   (b) 48504

(c) 48514   (d) 47494

29. 4.91 × 1.7 = _____

(a) 8.457   (b) 8.447

(c) 8.347   (d) 8.357

30. 4.28 × 3.2 = _____

(a) 13.696   (b) 13.586

(c) 13.596   (d) 13.796

31. H.C.F. of 48, 80, 112 is _____

(a) 24   (b) 6

(c) 32   (d) 16

32. L.C.M. of 21, 32 and 56 is _____

(a) 1344   (b) 672

(c) 168   (d) 224

33. 5 − 3.148 = _____

(a) 1.752   (b) 1.642

(c) 1.852   (d) 1.832

34. 14.96 + 24.81 − 14.43 = _____

(a) 24.24   (b) 23.34

(c) 25.34   (d) 25.24

35. $4\dfrac{3}{5} + 7\dfrac{1}{3} = \boxed{}$

(a) $\dfrac{179}{15}$ (b) $\dfrac{59}{5}$

(c) 12   (d) $\dfrac{176}{15}$

36. $\boxed{} - 2\dfrac{1}{4} = \dfrac{5}{8}$

(a) $\dfrac{15}{8}$ (b) $\dfrac{23}{8}$

(c) $\dfrac{13}{8}$ (d) 2

37. (1.45 × 3.2) + (6.5 × 2.14) = _____

(a) 18.55   (b) 17.55

(c) 18.45   (d) 17.35

38. Double of 4132 = _____

(a) 8254   (b) 8164

(c) 8154   (d) 8264

39. Half of 4328 = _____

(a) 2164   (b) 2054

(c) 2154   (d) 2064

40. The ratio of 35 min to 50 hour is _____

(a) 1:100   (b) 7:10

(c) 7:600   (d) 7:60

SECTION 2
(Mental Maths Concepts)

41. $182 \times 6 \div (7 \times 4) = $ _____
(a) 37   (b) 29
(c) 39   (d) 19

42. $82 - (29 - 95) = $ _____
(a) 138   (b) 248
(c) 148   (d) 128

43. $21 - \boxed{} = -8$
(a) 13   (b) 29
(c) 24   (d) 17

44. $(435 - 979) \div 272 = $ _____
(a) –2   (b) 2
(c) –3   (d) 4

45. $(16) \times (4) + (-5) \times (3) \div (-3)$
(a) 59   (b) 69
(c) 62   (d) 64

46. $\dfrac{318}{724} = \boxed{}$
(a) $\dfrac{159}{342}$ (b) $\dfrac{159}{362}$
(c) $\dfrac{78}{241}$ (d) $\dfrac{149}{362}$

47. Find 7th term in the given series.
42, 50, 58, ___, ___, ___
(a) 82   (b) 98
(c) 90   (d) 74

48. $\dfrac{3}{5} \div \dfrac{6}{25} \times \dfrac{7}{15} = \boxed{}$
(a) $\dfrac{7}{3}$ (b) $\dfrac{7}{12}$
(c) $\dfrac{5}{6}$ (d) $\dfrac{7}{6}$

49. $8 \times 42 + 7 \times 13 = $ _____
(a) 427   (b) 407
(c) 417   (d) 397

50. $135 \times 11 + 124 \times 82 = $ _____
(a) 11643   (b) 1160
(c) 11553   (d) 11653

51. $12.25 \div 2.5 = $ _____
(a) 49   (b) 0.49
(c) 0.049   (d) 4.9

52. $832 \div 1.6 = $ _____
(a) 510   (b) 500
(c) 520   (d) 530

53. 35:105 = 1: _____

(a) 5   (b) 3

(c) 4   (d) 2

54. If 6 bags of Soyabeen seeds cost ₹ 2400. Find the cost of 9 such bags.

(a) 3200   (b) 2800

(c) 3600   (d) 3800

55. The perimeter of triangle is 52 cm, if one of its side is 24 cm. If the other two side are equal find their lengths.

(a) 14 cm   (b) 32 cm

(c) 28 cm   (d) 12 cm

56. $\dfrac{3y}{5} = \dfrac{9}{25}$ then y = ☐

(a) 0.6   (b) 0.3

(c) 0.8   (d) 0.5

57. The ratio of 2 meter : 180 cm is _____

(a) 1:9   (b) 10:9

(c) 1:90   (d) 5:4

58. The ratio of ₹ 2:75 paise = _____

(a) 3:8   (b) 5:3

(c) 8:3   (d) 3:5

59. 4t = 9t – 40, t = _____

(a) 8   (b) 4

(c) 7   (d) 6

60. Find the number whose 6% is 252.

(a) 4000   (b) 4100

(c) 4210   (d) 4200

SECTION 3 (Mental Maths Challenge)

61. Sanjay, Ajay, Vijay and Usha are respectively 13 yrs 8 months, 14 years 3 months, 13 year 6 months and 12 years 11 months old. Find their average age.

(a) 12 yrs 7 months   (b) 13 yrs 5 month

(c) 13 yrs 9 months   (d) 13 yrs 6 months

62. The H.C.F and L.C.M. of two number are 45 and 90 respectively. If one of the number is 45, find the other one.

(a) 180   (b) 90   (c) 45   (d) 15

63. If x = 3, y = 4, z = 7 and a = 3, find the value of

$$\frac{xy}{a} - \frac{xy}{z}$$

(a) $\dfrac{16}{7}$ (b) $\dfrac{5}{3}$ (c) $\dfrac{10}{7}$ (d) $\dfrac{29}{21}$

64. In a library there were 72 books. Out of this 18 books were discarded. What percentage of the books was discarded?

(a) 10   (b) 15   (c) 25   (d) 20

65. Simplify: - 11.2 ÷ 4 – 0.25 × 8 + 4.7

(a) 1.24   (b) 2.5   (c) 5.5   (d) 2.24

66. A student has to secure 30% of the maximum marks to pass. He secures 350 marks and fails by 70 marks. Find the maximum marks.

(a) 1500   (b) 1300   (c) 1200   (d) 1400

67. In an office 7 clerks get a salary of ₹ 3100 each & 3 officers get a salary of ₹ 4200 each. Find the average salary of the employee in the office.

(a) ₹ 3300   (b) ₹ 3430   (c) ₹ 3440   (d) ₹ 3230

68. Shyam repaid ₹ 7200 which he had borrowed at 10.5% per annum . After 8 months, how much simple interest on the sum of ₹ 7200 did he pay ?

(a) ₹ 328   (b) ₹ 188   (c) ₹ 504   (d) ₹ 488

69. Find the difference of the greatest and least numbers of five digits by formed by using 2, 3, 5, 8 and 9 once only.

(a) 82359   (b) 65473   (c) 74943   (d) 65934

70. What is the 7th term of the sequence shown?
3200, 800, 200, ...

(a) $\dfrac{25}{64}$ (b) $\dfrac{25}{2}$ (c) $\dfrac{25}{8}$ (d) $\dfrac{25}{32}$

71. A square & a rectangular plot of land have same perimeter. If the square is of side 70 cm & rectangle is of length 90 cm, then the area of the rectangle is

(a) 4500 cm²   (b) 2500 cm²   (c) 3600 cm²   (d) 2000 cm²

72. A boy is 24 yrs younger than his father. Six years ago, the boy's age was one-third of the age of his father, then present age of boy is _____

(a) 17 yrs   (b) 18 yrs   (c) 36 yrs   (d) 20 yrs

73. In a two digit number, the unit place digit is 5. If the digits are interchanged, the new number formed is $\dfrac{19}{25}$ times the old number. What is the number?

(a) 55   (b) 75   (c) 65   (d) 95

74. The speed of car is 48 km per hour. What is the distance travelled in $\dfrac{7}{2}$ hours ?

(a) 148 km   (b) 158 km   (c) 168 km   (d) 178 km

75. If two complementary angles are in the ratio 1:4. Find the measure of smaller one.

(a) 18°   (b) 72°   (c) 90°   (d) 144°