SECTION 1 (Mental Maths Calculation)

1. (28 × 6) + (21 × 7) = _____

(a) 305 (b) 315
(c) 325 (d) 415

2. (96 × 3) + (25 × 8) = _____

(a) 468 (b) 478
(c) 488 (d) 498

3. (68 × 8) – (16 × 6) = _____

(a) 448 (b) 458
(c) 468 (d) 478

4. (60 × 40) – (20 × 15) = _____

(a) 2400 (b) 2300
(c) 2200 (d) 2100

5. (40% of 60) + (50% of 90)= _____

(a) 69 (b) 59
(c) 79 (d) 49

6. (40% of 80) – (30% of 90) = _____

(a) 5 (b) 6
(c) 3 (d) 2

7. (half of 80) + ($\frac{1}{4}$ of 60) = _____

(a) 45 (b) 65
(c) 75 (d) 55

8. (one third of 150) – ($\frac{1}{4}$ of 160) = _____

(a) 10 (b) 20
(c) 5 (d) 15

9. (15% of 70) + (5% of 80) = _____

(a) 14.5 (b) 15.5
(c) 16.5 (d) 17.5

10. (20% of 90) + (5% of 70) = _____

(a) 20.5 (b) 19.5
(c) 22.5 (d) 21.5

11. square of 13 + square of 14 = _____

(a) 345 (b) 355
(c) 365 (d) 375

12. square of 26 – square 19 = _____

(a) 305 (b) 315
(c) 325 (d) 335

13. (cube of 6) + (cube of 9) = _____

(a) 900 (b) 925
(c) 945 (d) 975

14. (cube of 10) – (cube of 5) = _____

(a) 750 (b) 775
(c) 875 (d) 857

15. $\sqrt{576} \times \sqrt{144}$ = _____

(a) 278 (b) 288
(c) 298 (d) 308

16. $\sqrt{625} - \sqrt{169}$ = _____

(a) 12 (b) 13
(c) 14 (d) 15

17. $\sqrt{361} + \sqrt{256}$ = _____

(a) 37 (b) 36
(c) 34 (d) 35

18. $\sqrt{400} \div \sqrt{16}$ = _____

(a) 8 (b) 25
(c) 5 (d) $50\sqrt{2}$

19. The sum of divisors of 64 is _____

(a) 128 (b) 127
(c) 124 (d) 122

20. The sum of all prime divisors of 270 is _____

(a) 5 (b) 15
(c) 20 (d) 10

21. Select the smallest number obtained from the given operations.

(a) $84 \div 4$ (b) $190 - 180$
(c) 2×7 (d) $95 \div 19$

22. Select the greatest number obtained from following operations.

(a) $24 + \sqrt{169}$ (b) $\sqrt{144} - \sqrt{81}$
(c) $295 - 267$ (d) $10^2 - \sqrt{100}$

23. If 128 is divided by 23, the remainder is _____

(a) 14 (b) 13
(c) 12 (d) 16

24. If 210 is divided by 18, the remainder is _____

(a) 14 (b) 13
(c) 12 (d) 16

25. If 148 is divided by 22, the remainder is _____

(a) 14 (b) 13
(c) 12 (d) 16

26. If 174 is divided by 21 the remainder is _____

(a) 2 (b) 6
(c) 4 (d) 5

27. 4236 × 18 = _____

(a) 76248 (b) 76468

(c) 76448 (d) 76498

28. 1678 × 24 = _____

(a) 40272 (b) 41292

(c) 41272 (d) 40172

29. 4729 × 26 = _____

(a) 123054 (b) 122954

(c) 124054 (d) 123154

30. 5.5 × 6.7 = _____

(a) 35.50 (b) 33.85

(c) 36.85 (d) 31.95

31. H.C.F of 70, 20, 150 is _____

(a) 20 (b) 10

(c) 30 (d) 50

32. L.C.M. of 12, 16 and 20 is _____

(a) 140 (b) 280

(c) 170 (d) 240

33. 27.076 + 3.29 + 6.72 = _____

(a) 37.086 (b) 37.016

(c) 37.806 (d) 37.096

34. 35 – 6.5 + 9.725 + 0.021 = _____

(a) 38.216 (b) 38.246

(c) 38.206 (d) 38.226

35. $4\frac{1}{4} + 2\frac{1}{3} =$

(a) $8\frac{11}{12}$ (b) $3\frac{11}{12}$

(c) $9\frac{11}{12}$ (d) $6\frac{7}{12}$

36. $\square - \frac{5}{8} = \frac{1}{4}$

(a) $\frac{7}{8}$ (b) $\frac{6}{8}$

(c) $\frac{9}{8}$ (d) $\frac{3}{8}$

37. (35 × 68) + (72 × 41) =_____

(a) 5222 (b) 5332

(c) 5122 (d) 5312

38. Double of 1036 is _____

(a) 2042 (b) 2062

(c) 2072 (d) 2082

39. Half of 4298 is _____

(a) 4149 (b) 2249

(c) 2149 (d) 2148

40. The ratio of 30 min to 4 hours is _____

(a) $\frac{6}{9}$ (b) $\frac{1}{8}$

(c) $\frac{4}{15}$ (d) $\frac{4}{18}$

SECTION 2
(Mental Maths Concepts)

41. $[90 - \{40 \div (20 \div 4)\}] - 16$

(a) 60 (b) 66

(c) 72 (d) 78

42. Which of the following pairs of number do not have common factor other than 1.

(a) 25, 35 (b) 24, 16

(c) 11, 5 (d) 48, 9

43. $\left(\frac{5}{6}-\frac{1}{3}\right) + \left(\frac{4}{9}+\frac{2}{3}\right)$

(a) $\frac{20}{18}$ (b) $\frac{19}{18}$

(c) $\frac{29}{18}$ (d) $\frac{14}{18}$

44. $\left(\frac{4}{9}+\frac{3}{2}\right) + \left(\frac{5}{6}+\frac{1}{3}\right) =$

(a) $\frac{21}{5}$ (b) $\frac{28}{9}$

(c) $\frac{23}{18}$ (d) $\frac{24}{27}$

45. $0.4 \times 0.9 \times 0.7 =$ _____

(a) 0.152 (b) 0.162

(c) 0.252 (d) 0.172

46. $0.64 \div 0.8 =$ _____

(a) 0.8 (b) 8

(c) 0.07 (d) 0.008

47. Anil bought a car for ₹ 2,50,000. After 5 months he sold it out at a loss of 20% find the selling price of a car.

(a) 2,00,000 (b) 2,25,000

(c) 2,15,000 (d) 2,35,000

48. On the purchase of a shirt and a pant Rahul got a discount of 15% and 20% respectively. If M.R.P. of shirt is ₹ 600 and pant is ₹ 900. How much did he pay for 2 shirts and 1 pants after discount

(a) ₹ 1460 (b) ₹ 1230

(c) ₹ 1740 (d) ₹ 1505

49. What will be the Sixth term as per the given number pattern 35, 48, 61, __, __, __

(a) 87 (b) 100

(c) 103 (d) 97

50. Write as percentage $3\frac{4}{25}$

(a) 316% (b) 160%

(c) 3.20% (d) 32%

51. 135 centigram = ___ hectogram

(a) 0.0135 (b) 0.135

(c) 13.5 (d) 1350

52. 320 decilitre = _____Decalitre

(a) 32 (b) 3.2

(c) 0.32 (d) 0.032

53. Find the ratio of :-

2 and $\frac{1}{2}$ year, 2 years 5 months

(a) $\frac{30}{29}$ (b) $\frac{2}{3}$

(c) $\frac{3}{5}$ (d) $\frac{12}{15}$

54. The average of eight numbers is 3. If sum of first seven numbers is 17 Find the 8th number.

(a) 7 (b) 9

(c) 11 (d) 4

55. If the measures of two angles of a triangle are 30^0 and 60^0. Find the measure of it's remaining angle.

(a) 120^0 (b) 100^0

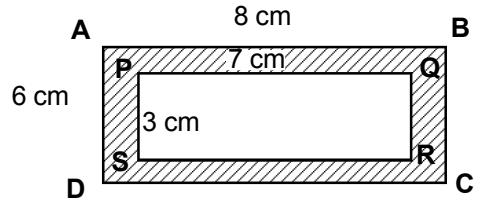
(c) 80^0 (d) 90^0

56. The measure of an angle is 22.5^0. Find the measure of its complementary angle.

(a) 55.5^0 (b) 67.5^0

(c) 45.5^0 (d) 47.5^0

57.



In the given rectangle ABCD and PQRS the area of shaded portion is _____ sq cm.

(a) 27 (b) 18

(c) 9 (d) 15

58. If the length of congruent sides of isosceles triangle is 2.7 cm and perimeter is 10 cm. The length of 3rd side is _____ cm

(a) 4.6 (b) 3.65

(c) 3.5 (d) 2.7

59. A square has a side of 10 cm. A smaller square of side 7 cm has been cut out of it. The area remaining is _____ sq. cm

(a) 49 (b) 51

(c) 53 (d) 9

60. If the radius of circle is 3 cm. Find it area if (π = 22/7)

(a) $\frac{225}{7}$ (b) $\frac{198}{7}$

(c) 3.05 (d) $\frac{201}{7}$

SECTION 3 (Mental Maths Challenge)

61. Peter has scored 75 marks in his English test, but he has the same score for his History and Maths paper. If his average score for 3 subject is 71 marks. What score did he get for the Maths test?

(a) 78 (b) 69 (c) 60 (d) 51

62. The traffic signals lights at three different road crossing change after every 5 seconds, 7 seconds and 9 seconds respectively. If they all change simulatenously at 9:00 hours, then they will again change simultaneously at _____

(a) 9:03:15 (b) 9:05:15 (c) 9:07:15 (d) 9:09:15

63. Ayush bought some toys at a discount of 25% on the original price. The original price of each toy is ₹ 80. If he makes total saving of ₹ 140, how many toys did he buy?

(a) 2 (b) 3 (c) 7 (d) 9

64. The ratio's of the angles of triangle are 3:5:7. Find the difference between the greatest and the smallest angle of that triangle.

(a) 48 (b) 36 (c) 24 (d) 12

65. $\frac{\sqrt{m}}{7} = 7$ Find the value of m.

(a) 1444 (b) 2500 (c) 2412 (d) 2401

66. If the circular playground with the radius 7 metre is levelled at rate of ₹ 2 per square metre. The total cost of leveling the ground is ₹ _____

(a) 308 (b) 310 (c) 320 (d) 324

67. $4\frac{2}{3} - \left[5\frac{1}{7} - 2\frac{2}{3}\right] = ?$

(a) $\frac{52}{21}$ (b) $\frac{46}{21}$ (c) $\frac{46}{7}$ (d) $\frac{52}{3}$

68. Mrs. Swara spent $\frac{2}{7}$ of her money and ₹ 875 is left. How much did she have first

(a) ₹ 1125 (b) ₹ 1225 (c) ₹ 1025 (d) ₹ 1325

69. Mr. Singh spent 5% of his salary on transport. He spent 7% on his rent. If Mr. Singh earned ₹ 1200, how much he saved in the end?

(a) ₹ 1048 (b) ₹ 924 (c) ₹ 1056 (d) ₹ 1024

70. A motercycle gives an average of 40 km per litre. How much petrol is required to travel 800 km.

(a) 20 *l* (b) 40 *l* (c) 60 *l* (d) 80 *l*

71. A Roll of paper 10 m long is placed in a fax machine. In every fax transmission received, the fax machine will use 25 cm of paper. What is the length of paper left if it receives 12 fax transmissions?

(a) 2 m (b) 3 m (c) 5 m (d) 7 m

72. $\frac{0.7 \times 0.3 \times 0.9}{0.35 \times 0.6 \times 0.72} = ?$

(a) 2.15 (b) 1.25 (c) 5.12 (d) 5.21

73. 12% of 90 will be how much more than 12% of 27.

(a) 5.76 (b) 5.67 (c) 7.56 (d) 7.65

74. Rahul walked 5 km to his school, he walked 7 m to his friend Jay house. Then he walked 7 km back to his home. How far did he walk?

(a) 19 km (b) 20 km (c) 7 km (d) 12.007 km

75. The smallest number, which when subtracted from the sum of the squares of 13 and 17 gives a perfect square is _____.

(a) 15 (b) 17 (c) 19 (d) 21