

IV(EM) ADTM

CENTRE FOR PEDAGOGICAL STUDIES IN MATHEMATICS (CPSM) ACHIEVEMENT-CUM-DIAGNOSTIC TEST IN MATHEMATICS-2022

INSTRUCTION: Write your Name, Class, Roll No. etc. in the answersheet. Select the correct answer out of (a), (b), (c) and (d) of particular item and blaken the specific rectangle ■ with H.B. pencil denoting the correct answer. For example, if (c) is the correct answer to Q. No. X: blaken like this: Q. No. X: Rough work is to be done on separate paper. Marks will be deducted for wrong answer. Don't waste time for answering a question which appears difficult to you, better try the next question.

- The angle shown in the capital letter V is
(a) obtuse angle (b) straight angle
(c) right angle (d) acute angle
- Number of line segments in MN is
(a) 10 (b) 6 (c) 4 (d) 7
- A match box is a rectangular parallelopiped. All the faces of this solid are
(a) squares (b) rectangles (c) triangles (d) trapeziums
- The geometrical shape of a one rupee coin is a
(a) circle (b) cube (c) cylinder (d) sphere
- The two diagonals of a quadrilateral are unequal, the quadrilateral may be a
(a) square (b) rhombus
(c) rectangle (d) isosceles trapezium
- Each page of your book is a
(a) rectangle (b) square
(c) parallelogram (d) rhombus
- Four points are given on a sheet of paper such that no three of which are in a straight line. The maximum number of straight lines that can be drawn using these points is
(a) 4 (b) 5 (c) 6 (d) 3
- Number of edges of a triangular pyramid is
(a) 4 (b) 5 (c) 6 (d) 9
- A prism has eight faces, the base of the prism is a
(a) quadrilateral (b) pentagon
(c) octagon (d) hexagon
- All the angles of a quadrilateral are equal, the measure of each angle of this quadrilateral is
(a) 90° (b) 45°
(c) 60° (d) none of these
- Which one of the following expression is not equal to 2?
(a) $2 + 2 - 2 \times 2 \div 2$ (b) $(2 + 2) - (2 \times 2) \div 2$
(c) $2 + (2 - 2) \times 2 \div 2$ (d) $(2 + 2 - 2 \times 2) \div 2$
- The unit digit of $36 \times 36 \times 36 - 25 \times 25 \times 25$ is
(a) 1 (b) 6 (c) 5 (d) 3
- The average of 15, 0, 7, 12, 0 and 8 is
(a) 8.4 (b) 7 (c) 8 (d) $10\frac{2}{5}$
- The eighth term of the series $\frac{1}{3}, \frac{1}{7}, \frac{1}{11}, \dots$ is
(a) $\frac{1}{27}$ (b) $\frac{1}{29}$ (c) $\frac{1}{31}$ (d) $\frac{1}{33}$
- The greatest number which divides 3784 and 9157 leaving 3 as remainder in each case is
(a) 202 (b) 199 (c) 196 (d) 189

16. The least number which when increased by 2 is exactly divisible by 12, 18, 24, 32 and 40 is
 (a) 1442 (b) 1440
 (c) 1438 (d) none of these
17. The least integer formed with the digits 2, 0, 5, 0 and 9 taking each only once is
 (a) 20095 (b) 259 (c) 20509 (d) 20059
18. A packet of potato chips weighs 12.05 gm, find the weight of 144 such packets.
 (a) 1735 gm (b) 1735.2 gm
 (c) 1736 gm (d) 1740 gm
19. How much is the sum of 9.37 and 45.01 is greater than the difference of 45.01 and 9.37?
 (a) 8.74 (b) 19 (c) 90.02 (d) 18.74
20. 45 men can do a piece of work in 35 days. How many more men will be required if the same work is to be finished in 25 days.
 (a) 9 (b) 18 (c) 21 (d) 27
21. The unit digit of $(25 \times 25 + 36 \times 36 + 46) - 2$ is
 (a) 7 (b) 6 (c) 5 (d) 1
22. How many hours does a leap year have?
 (a) 8760 hrs (b) 8772 hrs
 (c) 8784 hrs (d) 8774 hrs
23. A medical box is having 250000 tablets of weight 25 mg each. What will be the weight in kg of the medicines in all.
 (a) 7.25 kg (b) 62 kg
 (c) 62.5 kg (d) 6.25 kg

Class IV-(3)

24. $\frac{1\frac{2}{3}}{6-1\frac{2}{3}} \times \frac{2\frac{1}{4} \times 1\frac{2}{3}}{2\frac{1}{4}-1\frac{2}{3}} \times \frac{3\frac{1}{2}}{5\frac{5}{8}} \div 1\frac{7}{13} =$
 (a) 2 (b) 1 (c) $\frac{5}{7}$ (d) $\frac{1}{7}$
25. When 8612 is divided by a certain number the quotient is 210. Find the divisor if the remainder is 2.
 (a) 31 (b) 42 (c) 105 (d) 41
26. The least integer of four digits exactly divisible by 37 is
 (a) 1001 (b) 1073 (c) 1036 (d) 1035
27. The average of six results is 75. The average of the first five results is 70. The sixth result is
 (a) 100 (b) 90 (c) 85 (d) 95
28. The cost of pens is Rs. 1212 per dozen. Find the cost of one score of such pens.
 (a) Rs. 2020 (b) Rs. 1010
 (c) Rs. 20200 (d) None of these
29. What should be subtracted from smallest 5 digit number to get the greatest four digit number?
 (a) 999 (b) 10001 (c) 1001 (d) 1
30. Pradip saves Rs. 3675 a week. What will he save in the month of August, 2020?
 (a) Rs. 15750 (b) Rs. 16300
 (c) Rs 16275 (d) Rs. 16325
31. Which one of the following will be possible when you interchange the numbers 4 and 5 and the signs + and \times .
 (a) $5 \times 4 + 10 = 30$ (b) $10 \times 4 + 5 = 60$
 (c) $20 + 5 \times 4 = 85$ (d) $5 + 15 \times 4 = 90$

Class IV-(4)

32. $\frac{5}{6} \div \frac{3}{8}$ of $\frac{5}{9} \div \frac{4}{11} \times \frac{1}{11} =$
 (a) 1 (b) 2 (c) 4 (d) 5
33. Find the difference between the largest and the smallest numbers that can be formed by using each of the digits 7, 3, 0, 9, 5, 4 only once.
 (a) 940851 (b) 671851 (c) 70851 (d) 670851
34. The sixth term of the series 625, 5, 125, 25, 25, ..., 5 is
 (a) 5 (b) 25 (c) 125 (d) 625
35. The product $0.1 \times 0.2 \times 0.3 \times 0.4 \times 0.5 =$
 (a) 0.00012 (b) 0.0012 (c) 0.0000012 (d) 0.12
36. The reciprocal of $1\frac{1}{2}$ is
 (a) 2 (b) $\frac{2}{3}$ (c) $\frac{1}{3}$ (d) 3
37. The mix concrete you need 4 shouvelfuls of sand, 2 shouvelfuls of gravels and one shouvelful of cement. If 56 shouvelfuls are put into a mixer, how many shouvelfuls would be the gravels?
 (a) 20 (b) 16 (c) 32 (d) 8
38. The average age of a class of 18 students is 11 years. Two more students whose average age is 14 years join them. What is the new average age of the class.
 (a) 11 yrs (b) 11.6 yrs (c) 11.5 yrs (d) 11.3 yrs
39. The perimeter of a square is 180 m. The area of the square is
 (a) 2000 m² (b) 2025 m² (c) 2225 m² (d) 2005 m²
40. Rs. 1080 was divided among 45 children such that each boy got Rs. 22 and each girl Rs. 28. The number of girls is
 (a) 15 (b) 30 (c) 20 (d) 10
41. If January 1st is a wednesday then the 1st day of March in a leap year is

Class IV-(5)

- (a) Monday (b) Sunday
 (c) Saturday (d) Wednesday
42. The maximum number of students in which 175 bananas and 105 oranges can be equally divided is
 (a) 5 (b) 7 (c) 35 (d) 15
43. $\frac{1}{3} \div 0.25 + 0.75$ of $\frac{1}{12} + 0.5 + \frac{5}{48} =$
 (a) 1 (b) $\frac{1}{2}$ (c) 2 (d) 4
44. Govind is 48 years old. Now he is twice as old as his son Prem. How old was Prem 7 years ago.
 (a) 16 yrs (b) 13 yrs (c) 18 yrs (d) 17 yrs
45. The perimeter of a rectangle is 180 m; if the length is twice the breadth then the length is
 (a) 120 m (b) 60 m (c) 30 m (d) 80 m
46. The number of edges of a prism is 18; the number of surfaces of that prism is
 (a) 12 (b) 9 (c) 7 (d) 8
47. There are 12 dozen of apples in a basket, two dozen are added later, 10 apples got spoilt and are removed. The remaining are transferred equally into two baskets. How many apples are there in each basket?
 (a) 158 (b) 84 (c) 89 (d) 79
48. The product of the successor and the predecessor of a number is 195; the number is
 (a) 13 (b) 14
 (c) 15 (d) none of these
49. A car runs 58 km/hour. Find the distance covered by the car in 18 hours 30 minutes.

Class IV-(6)

- (a) 1044 km (b) 1073 km
(c) 1102 km (d) 1063 km
50. Buni by mistake multiplied 2978×978 instead of 2928×978 . By how much is her answer too great?
(a) 48900 (b) 4890 (c) 9780 (d) 58680
51. The smallest even number of 7 digits is
(a) 1000002 (b) 1000000
(c) 1111110 (d) 100002
52. The product of the greatest and the smallest number consisting of all the digits 1, 0, 4 and 5 only once is
(a) 5653450 (b) 38845
(c) 565345 (d) 388450
53. The sixth term of the series $\frac{1}{3}, \frac{1}{5}, \frac{1}{7}, \frac{1}{9}, \dots$ is
(a) $\frac{1}{11}$ (b) $\frac{1}{13}$ (c) $\frac{1}{19}$ (d) $\frac{1}{15}$
54. The greatest among $\frac{3}{4}, \frac{7}{10}, \frac{4}{5}$ and $\frac{1}{2}$ is
(a) $\frac{3}{4}$ (b) $\frac{7}{10}$ (c) $\frac{4}{5}$ (d) $\frac{1}{2}$
55. Hemantika spent Rs. 140 on Monday, Rs. 530 on Tuesday, Rs. 98 on Wednesday and on Thursday she did not spend any amount. Find her average expenses for these four days.
(a) Rs. 256 (b) Rs. 192 (c) Rs. 190 (d) Rs. 225
56. There are provisions for 84 men for 65 days. How many men should go so that the provision may last for 78 days.
(a) 35 (b) 28 (c) 70 (d) 14
57. Kajal prepares one table cover from 0.29 metre cloth. How many table covers can she prepare from 52.2 metres cloth?

- (a) 1800 (b) 180 (c) 360 (d) none of these
58. The least among $\frac{3}{4}, \frac{1}{2}, \frac{4}{5}$ and $\frac{7}{10}$ is
(a) $\frac{3}{4}$ (b) $\frac{7}{10}$ (c) $\frac{4}{5}$ (d) $\frac{1}{2}$
59. The LCM of 5 cm, 10 cm, 12 cm, 15 cm and 24 cm is
(a) 120 cm (b) 12 m (c) 60 cm (d) 1200 cm
60. This is a magic square. If the total of each row and of each column is the same, the values of a, b, c and d are
(a) $a = 27, b = 1, c = 3, d = 8$
(b) $a = 27, b = 13, c = 12, d = 18$
(c) $a = 12, b = 3, c = 27, d = 18$
(d) $a = 27, b = 12, c = 3, d = 18$

11	9	21
a	b	2
c	20	d

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