

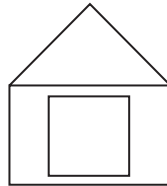
III(EM) ADTM

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: blacken 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.

1. Number of line segments in the adjoining figure is

- (a) 8 (b) 9
(c) 10 (d) 12



2. $A \xrightarrow{\hspace{2cm}} B$

What kind of figure is shown in the above figure?

- (a) straight line (b) ray
(c) line segment (d) none of these

3. The top surface of the table of your class-room is a
(a) square (b) rectangle (c) circle (d) triangle

4. The side faces of a ludo dice are
(a) rectangles (b) squares
(c) cube (d) parallelograms

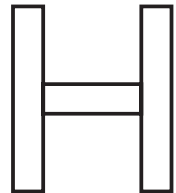
5. The minimum number of straight lines you need to enclose an area is
(a) 4 (b) 2 (c) 5 (d) 3

6. The upper surface of a five-rupee coin is
(a) square (b) semicircle (c) circle (d) cylinder

7. The number of plane surfaces of a match box is
(a) 12 (b) 2 (c) 4 (d) 6

8. Number of curved surface of a right circular cylinder is
(a) 2 (b) 3 (c) 1 (d) 0

9. Number of rectangles in the adjoining figure is
(a) 2 (b) 3
(c) 4 (d) 5



10. I have no length, no-breadth and no-height, I have position only. I am a
(a) plane (b) curve (c) point (d) straight line

11. Which one of the following numbers is divisible by 6.
(a) 12340 (b) 12344 (c) 12348 (d) 12346

12. What should be added to the smallest 6-digit number to get the largest 6-digit number?
(a) 99999 (b) 199999 (c) 100000 (d) 899999

13. Sum of two successive odd numbers is 3192, the smaller of these two is
(a) 1595 (b) 1597 (c) 1593 (d) 1591

14. The unit digit of $6 \times 16 \times 26 \times 36 \times 46$ is
(a) 5 (b) 8 (c) 6 (d) 2

15. The greatest 5-digit number exactly divisible by 99 is
(a) 99990 (b) 99909 (c) 99900 (d) 99999

16. The ninth multiple of 119 is

- (a) 9981 (b) 1081 (c) 1071 (d) 959
17. Covert 1 hour 1 minute 1 second in seconds.
(a) 3600 sec (b) 3662 sec (c) 3601 sec (d) 3661 sec
18. The eight term of the series 5, 15, 25, 35, ..., ..., ... is
(a) 85 (b) 75 (c) 95 (d) 65
19. The total number of days in the year 2000 and 2001 is
(a) 729 (b) 730 (c) 731 (d) 732
20. How many three digit numbers are there in all?
(a) 900 (b) 901 (c) 899 (d) 902
21. The sum of the smallest and greatest 5-digit numbers is
(a) 109999 (b) 119999 (c) 100000 (d) 999991
22. The sum of the place values of two 5's in 50,29,653 is
(a) 500050 (b) 550000 (c) 500005 (d) 5000050
23. The smallest five digit odd number divisible by 5 is
(a) 10015 (b) 10000 (c) 10005 (d) 10010
24. Write a four digit number which when multiplied by 9 reverse their digits.
(a) 1090 (b) 1089 (c) 1000 (d) 9911
25. $35 - [25 + \{15 \div (10 - 5)\}] =$
(a) 7 (b) 5 (c) 3 (d) 6
26. The 6th term of the series 6, 16, 36, 66, 106, ... is
(a) 176 (b) 186 (c) 166 (d) 156
27. The quotient arising from a division of a certain number by 23 is 15, the remainder being 10, find the number.
(a) 345 (b) 355 (c) 365 (d) 350
28. The length and breadth of a rectangle are 7 m and 5 m respectively. The perimeter of the rectangle is
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- (a) 48 m (b) 35 m (c) 12 m (d) 24 m
29. The sum of three consecutive integers is 54. The even integer among them is
(a) 18 (b) 16 (c) 20 (d) 19
30. The number of zeros in the number twenty crores one lakh and one is
(a) 6 (b) 5 (c) 4 (d) 7
31. In the following question select the odd one out.
(a) 32–27 (b) 36–31 (c) 38–33 (d) 27–23
32. The unit digit of the product $66 \times 709 \times 2346$ is
(a) 9 (b) 4 (c) 6 (d) 1
33. The predecessor of the smallest five digit integer is
(a) 9999 (b) 9998 (c) 999 (d) 10001
34. 101793 is divided by a number gives 237 as remainder and 273 as quotient, the divisor is
(a) 327 (b) 363 (c) 372 (d) 247
35. $\left(1 \div \frac{1}{2} \div \frac{1}{2} \div \frac{1}{2} \div \frac{1}{2}\right) + 16 =$
(a) 17 (b) $16\frac{1}{2}$ (c) 32 (d) 256
36. The largest number of four digits divisible by 89 is
(a) 9968 (b) 9967 (c) 9988 (d) 9910
37. The circumference of a wheel is 2m 4 cm. Find the distance it will cover when the wheel revolves 16500 times.
(a) 33 km (b) 33.5 km
(c) 33 km 660 m (d) 35 km 66 m
38. The daily income and expenditure of Ramu are Rs. 456 and Rs. 305 respectively. How much will he save in sept, 2020?

- (a) Rs. 4500 (b) Rs. 4681 (c) Rs. 4510 (d) Rs. 4530
39. What least number must be subtracted from 400 so that the remainder is divisible by 17?
- (a) 7 (b) 9 (c) 3 (d) 13
40. The lengths of the three sides of a triangular park are 13 m, 17 m and 15 m. The perimeter of the park is
- (a) 90 m (b) 50 m (c) 45 m (d) 75 m
41. How many hours are there in the year 2020?
- (a) 8784 (b) 8664 (c) 8640 (d) 8760
42. The product of two numbers is 125960 and one of them is 536, find the other.
- (a) 236 (b) 231 (c) 235 (d) 225
43. How many even numbers can you write using the digits 3, 2 and 0.
- (a) 4 (b) 2 (c) 3 (d) 1
44. The sum of two successive odd numbers is 192. The smaller of these two is
- (a) 93 (b) 97 (c) 95 (d) 99
45. Purba gave half of her marbles to Buni, then half of what was left to Chandra and then half of what was left to Sibbu leaving her with just 5 marbles. How many did Purba have to start with
- (a) 40 (b) 50 (c) 20 (d) 80
46. Sima is adding some numbers and gets the total 751, then she found that she has written one of the numbers as 73 rather than 37. What should be the correct total?

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- (a) 787 (b) 737 (c) 725 (d) 715
47. Which one of the expression is greatest?
- (a) $45 \div (3 + 2 \times 3)$ (b) $45 \div \{3 \times (2 + 3)\}$
- (c) $45 \div (2 + 3 \div 3)$ (d) $45 \div (3 + 3 + 3)$
48. 6 Paise is expressed as—
- (a) Rs. 0.6 (b) Rs. 0.06
- (c) Rs. 0.60 (d) Rs. 0.66
49. I purchased wheat worth Rs. 50.15, ghee worth Rs. 22.32 and other things worth Rs. 8.03. I gave a hundred rupee note to the shopkeeper. What amount should he return to me.
- (a) Rs. 20.50 (b) Rs. 19.50
- (c) Rs. 19 (d) Rs. 21.50
50. The sum of the ages of 21 students of your class is 147 years. What will be the sum of their ages after 2 years?
- (a) 168 yrs (b) 149 yrs (c) 190 yrs (d) 189 yrs
51. How many edges a cube have?
- (a) 4 (b) 6 (c) 12 (d) 8
52. A motor car travels 11 km in 2 litre of petrol. How many litres of petrol will be needed for a journey of 297 km?
- (a) 27 litres (b) 54 litres (c) $13\frac{1}{2}$ litres (d) 14 litres
53. The length of a rectangular field is three times its breadth. If the breadth of the rectangle be 3 metre find its perimeter.
- (a) 24 m (b) 12 m (c) 27 m (d) 48 m

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54. Rules for conversion from celcius scale to Fahrenheit scale is as follows:

1. first multiply by 9.
2. then divide the product by 5.
3. then add 32 to the quotient.

Now convert 40° celcius into Fahrenheit.

- (a) 72 °F (b) 100 °F (c) 104 °F (d) 140 °F

55. A bus travels at a speed of 48 km/hour. How far will it travel in 40 minutes?

- (a) 22 km (b) 32 km
(c) 30 km (d) 36 km

56. A train covers a distance of 432 km in 9 hours. What distance does it cover in 12 hours.

- (a) 576 km (b) 288 km
(c) 488 km (d) 720 km

57. $10 - \left[10 - \left\{ \left(10 \div 2 \times 4 + 2 \right) \right\} \right] =$

- (a) 0 (b) 1 (c) 10 (d) 9

58. Kalpataru walks 70 cm with each step, how many steps will he take to walk a distance of 840 metres?

- (a) 120 (b) 1200 (c) 12000 (d) 600

59. Subtract the difference of Rs. 415.75 and Rs. 282.90 from Rs. 500.

- (a) Rs. 367 (b) Rs. 367.15

(c) Rs. 366.15

(d) None of these

60. How much should be added to the sum of 37265432 and 6856385 to get 55000000?

(a) 94121817

(b) 879193

(c) 20878183

(d) 10878183

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