

Grade
6

M-CAT Assessment Round Sample Question Paper

Return the answer sheet along with question paper to the invigilator at the end of the exam.



TOTAL MARKS
100



QUESTIONS
50



DURATION
60 mins



Instructions for Student:

- Read the question carefully before answering.
- Each question has 4 options (A, B, C & D).
- Choose one correct option as your answer, from the 4 options.
- Every question carries 2 marks.
- On the answer sheet blacken the correct option against the corresponding question number,

The Correct Method

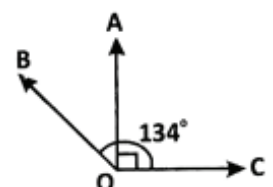
Q.	Answer
1	(A) (B) ● (D)

The Wrong Methods

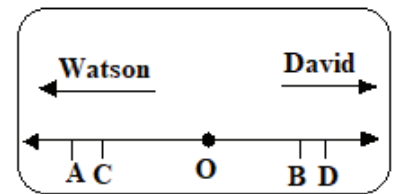
Q.	Answer
1	(A) ● ● (D)
1	(A) (B) ● (D)
1	(A) (B) ✓ (D)
1	(A) (B) ✗ (D)

- Use pencil to mark your answer.
- If you wish to change your answer, erase the previous mark completely.

1. Ten Arab in the Indian place value system is the same as _____ in the international place value system.
- Hundred Billion
 - Ten Billion
 - Hundred Million
 - Ten Million
2. Which is the greatest among the following?
- Additive Identity
 - Smallest whole number
 - Multiplicative Identity
 - All are the same
3. Which of the following statements is FALSE?
- A line has two end points.
 - Using a protractor, an angle of any measure between 0° and 180° can be drawn.
 - An angle whose measure is greater than 90° is an obtuse angle.
 - Two coinciding rays with a common end point form an angle of measure 0° .
4. Which of the following is the greatest negative integer?
- 100
 - 500
 - 1
 - 50
5. There are XXI boxes of sweets. XI of them have X sweets each and the remaining have XX sweets each. How many sweets are there in total?
- XCCC
 - CCCX
 - XXCCC
 - CCCXX
6. A party of 20 people went to a dhaba. They ordered a meal of ₹ 36.60 each, 5 of them had forgotten to bring money. In order to settle the bill, how much more money did the other 15 people have to pay?
- ₹ 36.02
 - ₹ 12.20
 - ₹ 15.20
 - ₹ 15.26
7. Which of the following statements is INCORRECT?
- The line segments which form a polygon are called sides.
 - Any two sides with a common vertex are called adjacent sides.
 - Two sides of a quadrilateral which do not have a common vertex are called opposite sides.
 - The meeting point of a pair of sides is called a diagonal.
8. Choose the rectangular number from the given numbers.
- 9
 - 4
 - 8
 - 15
9. What is the measure of $\angle AOB$ in the given figure?
- 90°
 - 44°
 - 224°
 - 134°



10. Watson and David started from a place denoted by O, in opposite directions. After Watson walked for 8 m, he met John. After 7 m from the starting point, David met Victor. Watson went back 2 m to buy a book. David went ahead 3 m to the library. At which point did Watson buy the book?



- a. A
b. C
c. O
d. B

11. What will be the HCF of the denominator and the numerator of a fraction which is in its lowest form?

- a. 1
b. 0
c. Always an even number
d. Can't be determined

12. What is the difference between 54677 and 42322, rounded off to its nearest thousands?

- a. 12000
b. 13000
c. 12300
d. 12400

13. Shankar has ₹ 150. He spent $\frac{1}{6}$ of it to buy chocolates, $\frac{1}{5}$ of the amount on pens and $\frac{1}{2}$ of it on books. How much money (in ₹) is left with Shankar?

- a. ₹ 40
b. ₹ 30
c. ₹ 20
d. ₹ 10

14. Compare: $223 \times 96 - 223 \times 16$ _____ $1100 \times 19 - 1100 \times 9$

- a. >
b. <
c. =
d. Cannot compare

15. Which of the following is a CORRECT statement?

- a. The perimeter of an equilateral triangle of side 'S' units is $S \times S$ square units.
b. The area of a square of side 's' units is $4s$ units.
c. The perimeter of a rectangle of side 'l' units and breadth 'b' units is $2 \times (l + b)$ units.
d. The area of a triangle of height 'l' units and base 'b' units is $4lb$ square units.

16. There are 153 apples and 119 oranges. These fruits are to be arranged into heaps containing the same number of fruits. What is the maximum number of fruits possible in each heap?

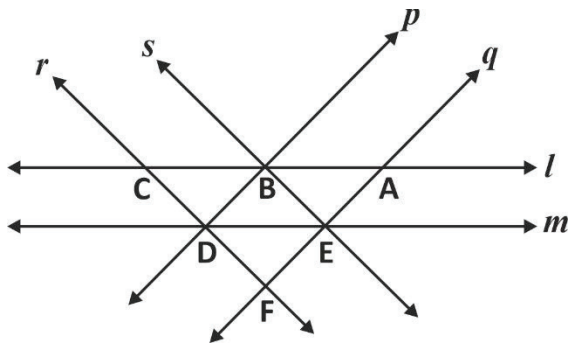
- a. 15
b. 23
c. 17
d. 20

17. Identify the number and types of shapes in the given figure:

- a. 1, Sphere
b. 2, Sphere, Pentagon
c. 3, Sphere, Hexagon, Pentagon
d. 4, Sphere, Circle, Hexagon, Pentagon



18. How many groups of concurrent lines are there in the given figure?



- | | |
|------|------|
| a. 3 | b. 4 |
| c. 5 | d. 6 |

19. Arrange the given numbers in ascending order: $\frac{5}{6}, \frac{2}{3}, \frac{5}{3}, 1$

- | | |
|--|--|
| a. $\frac{5}{6} < \frac{2}{3} < \frac{5}{3} < 1$ | b. $1 < \frac{5}{6} < \frac{2}{3} < \frac{5}{3}$ |
| c. $\frac{2}{3} < \frac{5}{6} < 1 < \frac{5}{3}$ | d. $1 < \frac{5}{6} < \frac{5}{3} < \frac{2}{3}$ |

20. Solve: $(50 - 15 \div 7 - 5) + (12 \div 3 \times 2)$

- | | |
|--------|------------------|
| a. 9.5 | b. 8 |
| c. 8.5 | d. None of these |

21. How much should Ajit pay for x pencils and y sharpeners if each pencil costs ₹ 5 and each sharpener costs ₹ 8?

- | | |
|------------------|------------------|
| a. ₹ $(5y + 8x)$ | b. ₹ $(5x + 8y)$ |
| c. ₹ $(5x - 8y)$ | d. ₹ $5(x - 8)y$ |

22. Which of the following is TRUE about the successor of a 4-digit number?

- It will always be a 4-digit number.
- It will always be a 5-digit number.
- It will always be a 3-digit number.
- It will be a 4-digit number except for the greatest 4-digit number.

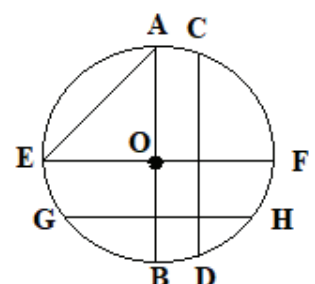
23. Choose the CORRECT property of a ray.

- A ray and a line are the same.
- A ray has one end fixed.
- A ray can be extended endlessly towards any side.
- A ray has a fixed length.

24. If O is the centre of the circle in the given figure, then which of the following is/are TRUE about the length of chord AB and chord EF?

- The length of chord AB is greater than chord EF.
- The length of both chords is equal.
- Both of the chords are diameters.

- | | |
|-------------------------|-------------------|
| a. (i), (ii), and (iii) | b. (i) and (ii) |
| c. (i) and (iii) | d. (ii) and (iii) |



25. A girl is facing south; in which direction will she face if she makes:

- i. $\frac{1}{2}$ revolution anticlockwise
- ii. $\frac{3}{4}$ revolution clockwise

(Considering her initial position in both cases)

- a. (i) North and (ii) East
- b. (i) North and (ii) West
- c. (i) West and (ii) North
- d. (i) East and (ii) North

26. In a party room, 20 workers decorate 70 tables. Each table is decorated with 10 silver balloons and 15 gold balloons. Which equation could be used to find x , the total number of silver and gold balloons needed to decorate all the tables?

- a. $x = 70 \times (10 + 15)$
- b. $x = 15 \times (70 + 10)$
- c. $x = 70 + (10 \times 15)$
- d. $x = 20 \times (70 + 10 + 15)$

27. If 60 is divided into two parts in the ratio 2:3, then what is the difference between those two parts?

- a. 10
- b. 12
- c. 5
- d. 18

28. Which of the following statements is CORRECT?

- a. If an even number is divided by 2, the quotient is always odd.
- b. All even numbers are composite numbers.
- c. The LCM of two co-prime numbers cannot be equal to their product.
- d. Every number is a factor of itself.

29. What number is equal to $\frac{0.2}{0.02} + \frac{0.02}{0.2}$?

- a. 10.1
- b. 10.01
- c. 1.01
- d. 10.02

30. A number is multiplied by 6. Then, 12 is added to the product. The result is 84. What is the number?

- a. -12
- b. 72
- c. 12
- d. 72

31. The length and breadth of a rectangular plot are 900 m and 700 m respectively. If three rounds of the fence are fixed around the field at the cost of ₹ 8 per metre, then what is the total amount spent?

- a. ₹ 7,680
- b. ₹ 2,560
- c. ₹ 76,800
- d. ₹ 25,600

32. A car consumes 28 litres of petrol to cover 2100 km. How much petrol will be needed to cover a distance of 3600 km?

- a. 48 litres
- b. 42 litres
- c. 40 litres
- d. 46 litres

33. I am 10 less than the smallest three-digit odd negative integer. Who am I?

- a. -1009
- b. -989
- c. -111
- d. -91

34. What is the largest number with 3 and 5 as its only digits, 3 appearing 3 times and 5 appearing 5 times, yet divisible by 5?

- a. 5,55,55,333
- b. 5,33,35,555
- c. 5,55,53,335
- d. 3,33,55,555

35. A man completes $\frac{5}{8}$ of a job in 20 days. At this rate, how many more days will it take him to finish the job?

- a. 12
- b. 16
- c. 17
- d. 18

36. Which of the following is INCORRECT about fractions and decimals?

- a. There are infinite fractions between two consecutive whole numbers.
- b. Two or more decimals having equal values are called equivalent decimals.
- c. Fractions that have denominator 10, 100, 1000, etc. are called Decimal Fractions.
- d. Fractions that have one in the numerator are called proper fractions.

37. What is the value of the expression $(7x + 4a - 11 - 2x + 3a)$ if $x = -1$ and $a = 1$?

- a. 9
- b. -13
- c. 13
- d. -9

38. A square-shaped park, has sides of measure 20 m. A rectangular pond of length 3m and breadth 2m is located at the centre of the park. What is the area of the park excluding the pond?

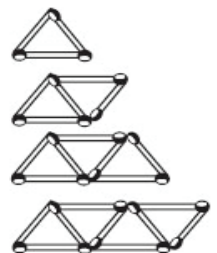
- a. 336 sq. m
- b. 384 sq. m
- c. 394 sq. m
- d. 366 sq. m

39. A number is divisible by both 4 and 15. By which other number will that number be always divisible?

- a. 72
- b. 60
- c. 62
- d. 42

40. How many matchsticks are needed for n repetitions of the given pattern?

- a. $2n$
- b. $3n$
- c. $2n + 1$
- d. $3n + 1$



41. The length of wire used to fence a square field is 144 m. What is the measure of each side of the field?

- a. 36 m
- b. 38 m
- c. 44 m
- d. 46 m

42. Find the difference between the sum of 998 and -486 and the sum of 290 and 732.

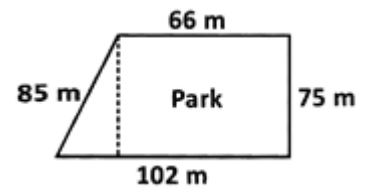
- a. -510
- b. +510
- c. -1022
- d. +512

43. If $1 + 2 + 3 + 4 + 5 + \dots + 10 = 55$ then the value of $4 + 8 + 12 + 16 + 20 + \dots + 40$ is _____.

- a. 110
- b. 165
- c. 220
- d. 275

44. Raghu walks around a park with dimensions given in the figure, every day.
How much distance does he cover in two rounds?

- a. 328 m
- b. 298 m
- c. 228 m
- d. 656 m



45. A line segment $\overline{AB} = 4.6$ cm. Another line segment $\overline{CD} = 3.8$ cm. What is the measure of the line segment whose length is equal to the difference of $\overline{AB}$ and $\overline{CD}$?

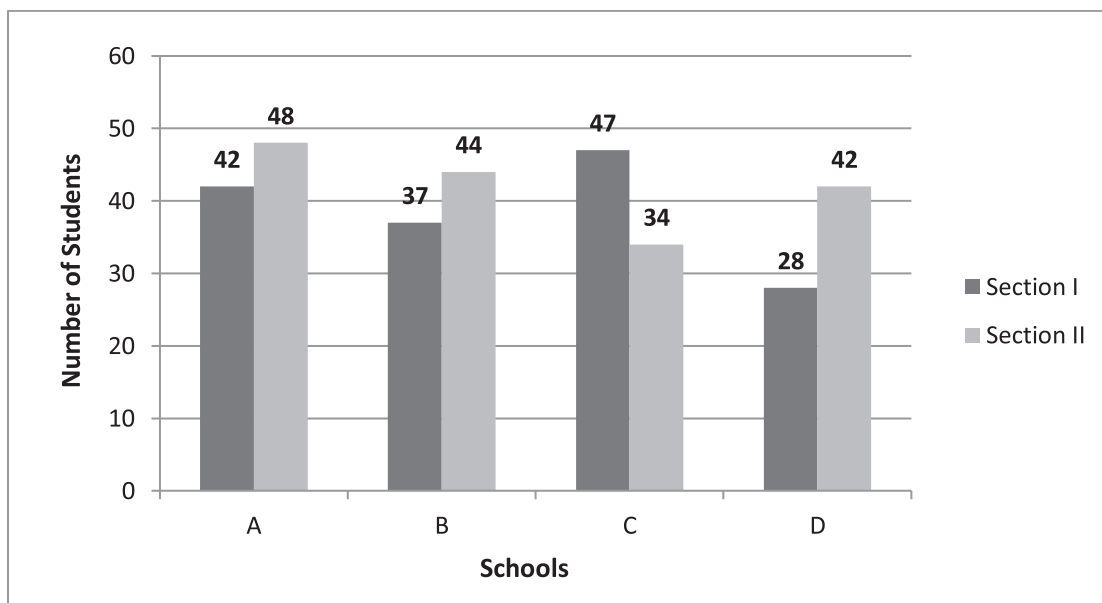
- a. 1.8 cm
- b. 0.8 cm
- c. 7.4 cm
- d. 8.4 cm

46. What is the value of t such that the number $589t56$ is divisible by 5?

- a. 5
- b. 0
- c. The number will be divisible by 5 for any value of t .
- d. The number will not be divisible by 5 for any value of t .

Answer questions 47–50 based on the information given below:

The following bar graph represents data about the number of students in class 6 in two different sections of four different schools.



47. The number of students studying in section II in all the schools together is x times the number of students studying in section I in School D. What is the value of x ?

- a. 4
- b. 5
- c. 6
- d. 7

48. In which school is the number of students in both sections the highest?

- a. School A
- b. School B
- c. School C
- d. School D

49. What is the ratio of the total number of students in schools A and C to the total number of students studying in B and D?

- a. 9:8
- b. 171:151
- c. 168:151
- d. 57:56

50. What is the total number of students in both the sections together in all schools?

- a. 228
- b. 322
- c. 348
- d. 351

