NELTAS PATH TO EDUCATIONAL EXCELLENCE | M-CAT International Maths Competition

Grade

4

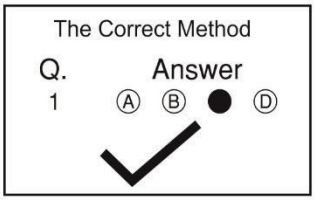
M-CAT Assessment Round Sample Question Paper

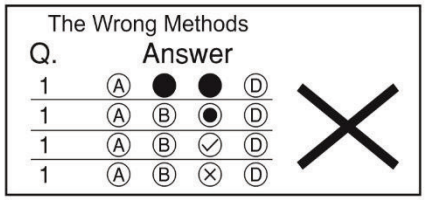
Return the answer sheet along with question paper to the invigilator at the end of the exam.

TOTAL MARKS	QUESTIONS	DURATION
100	**50**	**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,





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

1. **What is the missing number in the given pattern?**
   12, 13, 11, 12, 10, 11, 9, _____
   a. 10
   b. 9
   c. 11
   d. 12

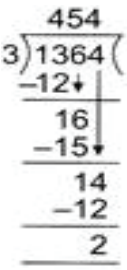
2. **Which of the following expressions is NOT true?**
   a. 12 × 89 = (10 + 2) × (80 + 9)
   b. 2560 = 2000 + 500 + 60
   c. 27 – 9 = 10 + 6
   d. 12 × 5 = 10 + 2 × 5

3. **Which of the following numbers is a multiple of both 3 and 4?**
   a. 9
   b. 12
   c. 15
   d. 16

4. **Solve to find the simplest form:** $\frac{6}{14} \times \frac{7}{8} \times \frac{4}{3}$
   a. $\frac{3}{4}$ b. $\frac{1}{4}$ c. $\frac{1}{2}$ d. $\frac{3}{2}$

5. **Using the digits 0, 2, 3, and 4, write down the smallest number possible to two decimal places without putting 0 in the tens or tenths column.**
   a. 20.34
   b. 02.34
   c. 23.04
   d. 24.30

6. **Kartik solved the division problem as shown.**
   Which expression could be used to check his answer?



   a. (454 × 3) + 2
   b. (454 × 3) + 3
   c. (454 × 3) × 2
   d. (454 × 3) × 3

7. **Which of the following shows the correct and complete prime factorization of 98?**
   a. 98 = 2 × 49
   b. 98 = 2 × 7 × 7
   c. 98 = 2 × 2 × 7
   d. 98 = 2 × 2 × 7 × 7

8. **Nayan drives 34 km on day 1, 66 km 73 m on day 2, 54 km 889 m on day 3, and 32 km 112 m on day 4. What is the total distance driven by Nayan in four days?**
   a. 187 km 74 m
   b. 871 km 73 m
   c. 970 km 74 m
   d. 185 km 73 m

9. What is the product of the face value of 6 and the place value of 7 in 5,68,007?
a. 42,000
b. 4,200
c. 420
d. 42

10. Manan has ₹ 7000. He gave ₹ 1500 to Sumit and distributed the rest among his five friends. What is the amount received by each of those five friends?
a. ₹ 1100
b. ₹ 3300
c. ₹ 5500
d. ₹ 300

11. Arrange the given numbers in ascending order: 5.25, 15.3, 5.87, 5.78, 5.2
a. 5.25 > 5.2 > 5.78> 5.87 > 15.3
b. 5.2 < 5.87 < 5.78 < 5.25 < 5.2
c. 5.2 < 5.25 < 5.78 < 5.87 < 15.3
d. 15.3 < 5.87 < 5.78 < 5.25 < 5.2

12. The radius of a circle is 6 cm. What will be the measure of its diameter?
a. 8 cm
b. 10 cm
c. 12 cm
d. 38cm

13. Yamini has ₹ 12,000. She spends ₹ 1224 on a bag, ₹ 3500 on a dress and ₹ 2000 on movie tickets. What is the amount of money left with Yamini after all the expenses?
a. ₹ 3477
b. ₹ 4322
c. ₹ 5000
d. ₹ 5276

14. Which one of the following is a factor of 45 but not a multiple of 3?
a. 15
b. 9
c. 5
d. 7

15. A square wall has a side of 30 m. What is the difference between its perimeter and its area?
a. 900
b. 780
c. 680
d. Subtraction is not possible

16. Which of the following is INCORRECT?
a. The metric unit of length is metre.
b. The metric unit of capacity is kilometre.
c. The metric unit of weight is gram.
d. All of the above

17. Which of the following is a leap year?

a. 2001
b. 2002
c. 2003
d. 2004

18. What is the total amount shown below?

a. ₹ 1520
b. ₹ 1020
c. ₹ 720
d. ₹ 1220

19. What is the other name of a rectangle with four equal sides?

a. Triangle
b. Square
c. Circle
d. Rectangle

20. Choose the CORRECT pair among the following.

a. 1 cm = 1 mm
b. 1 km = 1000 m
c. 1 m = 10 cm
d. 10 m = 100 cm

21. Suhani is 7 years 8 months old and her sister is 9 years 5 months old. What is the age difference between Suhani and her sister?

a. 1 year 9 months
b. 2 years 3 months
c. 1 year 7 months
d. 2 years 8 months

22. Compare: Two lakh fifteen thousand and three _____ 2,50,000

a. >
b. <
c. =
d. Cannot determine

23. Which figure shows the correct factor tree for 24?

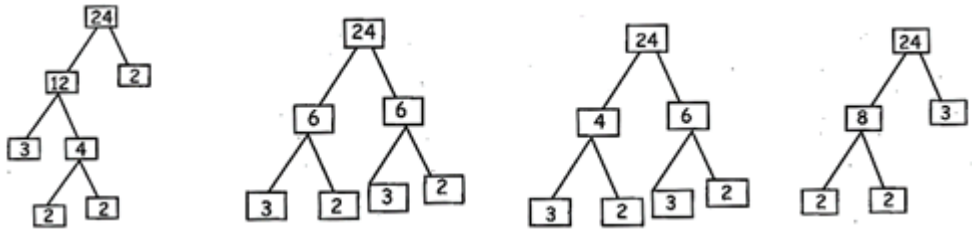


Figure A **Figure B** **Figure C** **Figure D**

a. Figure A
b. Figure B
c. Figure C
d. Figure D

24. A farmer has to plough a square field of side 90 m. What is the total area he needs to plough?

a. 1800 m^2
b. 8100 m^2
c. 900 m^2
d. 360 m^2

25. 1000 + 500 + 60 + 9 + $\frac{3}{10}$ + $\frac{4}{1000}$ is the expanded form of _____.

a. 1569.304
b. 1569.340
c. 1569.034
d. 1569.346

Answer questions 26-28 based on the pictograph given below:

Here is some information about the prices and quantities of fruits sold by Manya.

Fruits	Quantity sold	Rate
Banana		₹ 10 per piece
Orange		₹ 30 per piece
Mango		₹ 50 per piece

Key:  **= 5 bananas,**  **= 3 oranges,**  **= 1 mango**

26. Which fruit was sold the most?

a. Mango
b. Banana
c. Orange
d. None of these

27. What is the amount of money earned by Manya by selling mangoes?

a. ₹ 100
b. ₹ 200
c. ₹ 300
d. ₹ 900

28. What is the total number of fruits sold by Manya?

a. 39
b. 42
c. 43
d. 45

29. Which of the following is a method of representing a data set using bars?

a. Pictograph
b. Bar Graph
c. Line Graph
d. None of these

30. What is the product of the smallest prime number and the largest 4-digit number?

a. 9999
b. 19998
c. 29997
d. 40000

31. Which of the following is the equivalent to the fraction $\frac{7}{8}$?

a. $\frac{14}{8}$ b. $\frac{7}{16}$ c. $\frac{21}{24}$ d. $\frac{10}{11}$

32. The number 6372 is divisible by _____.

a. 2
b. 3
c. 6
d. All the above

33. Train A leaves from a station at 6:27 p.m., and Train B leaves from the same station at 6:47 p.m. How much time is there between the departure of two trains?

a. 10 minutes
b. 13 minutes and 42 seconds
c. 20 minutes
d. 18 minutes and 13 seconds

34. Sejal wants to fence her circular field with wire. Which of these will give her find the required length of the wire?

a. Radius
b. Diameter
c. Circumference
d. Area

35. For a project, Simmi cuts a piece of paper into a shape with 4 sides, but none of the sides are of the same length. What is the shape of the paper?

a. Rectangle
b. Quadrilateral
c. Square
d. Pentagon

36. Which of the following is not TRUE?

a. A fraction has two parts: a numerator and a denominator.
b. Equivalent fractions are fractions that denote the same value.
c. A mixed fraction is a combination of a whole number and a fraction.
d. Like fractions are fractions with the same numerator.

37. Sneha bought 12 boxes of cold drinks for a party. There are 19 cans in each box. How many cans of cold drink did she buy in total?

a. 232
b. 228
c. 216
d. 202

38. What is the value of 11.8 + 67.03 – 14.52?

a. 64.31
b. 63.58
c. 65.42
d. 62.08

39. Solve: $\frac{4}{6} + 5\frac{3}{6} - \frac{3}{6} - \frac{2}{6}$

a. $\frac{32}{3}$ b. $\frac{33}{6}$ c. $\frac{16}{3}$ d. $\frac{16}{6}$

40. Which of the following is INCORRECT about prime numbers?

a. 2 is the smallest prime number.
b. 2 is the only prime number which is even.
c. 3 is the smallest odd prime number.
d. 1 is a prime number.

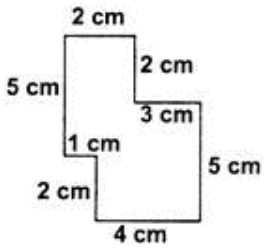
41. The lines that meet at a point and make an angle of 90° are called _____.

a. Finite lines
b. Perpendicular lines
c. Parallel lines
d. Curved lines

42. I am a 4-digit number. All my digits are different. They add up to 20. The hundred's digit is double the one's digit and the ten's digit is thrice the thousand's digit. Identify the number.

a. 6734
b. 9236
c. 2864
d. 2963

43. Find the perimeter of the given figure.



a. 24 cm
b. 22 cm
c. 21 cm
d. 18 cm

44. What is the expanded form of the predecessor of XXVI?

a. 10 + 10 + 5
b. 10 + 10 + 3
c. 10 + 10 + 1
d. 10 + 10

45. Find ∠B if the interior angles of a triangle ABC are ∠A = 65° and ∠C = 70°.

a. 40°
b. 45°
c. 50°
d. 55°

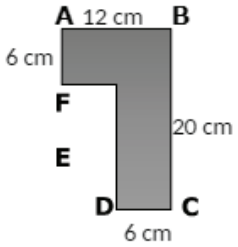
46. Out of a can of 15 kg of ghee, Suman's mother used 7 kg 300 g. How much ghee is left in the can?

a. 8 kg 800 g
b. 22 kg 300 g
c. 8 kg 300 g
d. 7 kg 700 g

47. What is the amount of money spent on buying a chair if a loss of ₹ 3122 was made by selling it at ₹ 7000?

a. ₹ 3122
b. ₹ 7122
c. ₹ 10122
d. ₹ 3878

48. What is the area of ABCDEF?



a. 480 cm^2
b. 156 cm^2
c. 240 cm^2
d. 360 cm^2

49. How many lines can pass through one single point?

a. 0
b. 1
c. 5
d. Infinite

50. A truck uses 1L 200 mL of diesel for a distance of 1 km. How many litres of diesel does it need to travel a distance of 20 km?

a. 24 L
b. 25 L
c. 2 L 400 mL
d. 2 L 500 mL