



M-CAT GRAND FINALE

Sample Paper

(Based on the new exam pattern)



TOTAL MARKS
80



QUESTIONS
40



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.
- **New Exam Pattern:**
 1. Each question will carry 1, 2, or 4 marks, depending on its difficulty level.
 2. **Negative Marking:** Additional marks will be deducted for every incorrect answer (0.25 marks for a 1-mark question, 0.5 marks for a 2-mark question, and 1 mark for a 4-mark question).
 3. The Assessment Round score will be included in the Grand Finale score using a weighted average method. 30% of the Assessment Round and 70% of the Grand Finale score.
 4. New Method to Calculate Marks for Grand Finale Awards.

	Assessment Round	Grand Finale
Actual Marks	60	80
Weightage	30%	70%
Marks After Weighted Average Rule	$60 \times 30/100 = 18$	$80 \times 70/100 = 56$
Final Marks for Grand Finale Awards	$18 + 56 = 74$	

- 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.

All The Best !

SECTION 1: Concept Check

1. Which of the following are predecessor and successor of 1,345? (1m)
 - a. 1,344 and 1,346
 - b. 1,343 and 1,344
 - c. 1,344 and 1,348
 - d. 1,342 and 1,347
2. Add: 65 km 15 m + 54 km 75 m (1m)
 - a. 90 km
 - b. 119 km 90 m
 - c. 209 km
 - d. 80 km 129 m
3. What is the shape of a regular dice? (1m)
 - a. Cube
 - b. Cone
 - c. Cuboid
 - d. Cylinder
4. Arrange the following numbers in ascending order: 11, 22, 76, 91, 40 (1m)
 - a. 91 , 76 , 40 , 22 , 11
 - b. 11 , 22 , 40 , 76 , 91
 - c. 91 , 76 , 40 , 11 , 22
 - d. 11 , 76 , 40 , 22 , 91
5. What is the time shown by the clock? (1m)
 - a. 05:17:12
 - b. 03:25:07
 - c. 04:25:12
 - d. 03:05:07
6. If you trace an outline of the candle, you get a _____. (1m)
 - a. Cylinder
 - b. Cone
 - c. Cube
 - d. Cuboid
7. Which of the following months has the fewest number of days? (1m)
 - a. September
 - b. January
 - c. February
 - d. All months have the same number of days
8. 338 is how many less than 500? (1m)
 - a. 162
 - b. 238
 - c. 138
 - d. 272



9. Which is the most appropriate tool to measure 1000 ml of milk? (1m)

- a. A ruler
- b. A weighing scale
- c. A meter rod
- d. A measuring jug

10. What number can be divided by 5786 to give the answer 5786? (1m)

- a. 10
- b. 100
- c. 1
- d. None of these

SECTION 2: Applied Mathematics

11. Which of the given fractions is odd one out? (2m)

$$\frac{1}{2}, \frac{1}{3}, \frac{1}{10}, \frac{4}{3}$$

a. $\frac{1}{2}$

b. $\frac{1}{3}$

c. $\frac{1}{5}$

d. $\frac{4}{3}$

12. Fill in the blank: $800 \div 2 = 20 \times \underline{\hspace{1cm}}$ (2m)

- a. 10
- b. 20
- c. 50
- d. 40

13. Compare: ₹ 45 _____ 5000 p (2m)

- a. >
- b. <
- c. =
- d. Cannot be compared

14. Which of the following is TRUE? (2m)

- a. Only one line can pass through two points.
- b. A line has two dimensions i.e., length, breadth.
- c. A ray has a starting point and ending point.
- d. A segment is a part of a line with a fixed length and only one end point.

15. Arrange the following fractions in descending order of value: (2m)

$$\frac{1}{10}, \frac{3}{10}, \frac{6}{10}, \frac{5}{10}, \frac{9}{10}$$

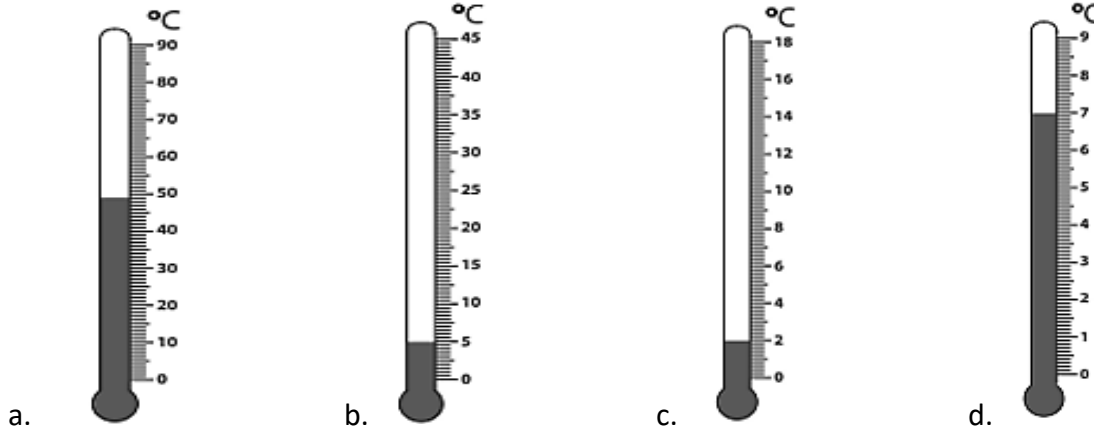
a. $\frac{1}{10} > \frac{3}{10} > \frac{6}{10} > \frac{5}{10} > \frac{9}{10}$

b. $\frac{1}{10} > \frac{3}{10} > \frac{5}{10} > \frac{6}{10} > \frac{9}{10}$

c. $\frac{1}{10} > \frac{3}{10} > \frac{9}{10} > \frac{5}{10} > \frac{6}{10}$

d. $\frac{9}{10} > \frac{6}{10} > \frac{5}{10} > \frac{3}{10} > \frac{1}{10}$

16. Which thermometer represents the coldest weather or the lowest temperature? (2m)



17. The number 32 can be written in Roman numerals as _____. (2m)

- a. XXXII
- b. XIII
- c. IIIXXX
- d. XLIII

18. What number should be added to 9997 to get the smallest five-digit number? (2m)

- a. 3
- b. 2
- c. 1
- d. 10000

19. Which of the following can indicate the weight of a person? (2m)

- a. 58 kg
- b. 570 kg
- c. 5200 kg
- d. 1200 kg

20. How many hours are there in 6 days and 420 minutes? (2m)

- a. 151
- b. 144
- c. 124
- d. 544

SECTION 3: Case-Based Mathematics

21. If the cost of 3 similar shirts is ₹ 4500, then what is the cost of one shirt? (2m)

- a. ₹ 1000
- b. ₹ 750
- c. ₹ 1500
- d. ₹ 2000

22. A lady cooked 5 l 200 ml tomato sauce on the first day and 2 l 300 ml on the second day. How much sauce did she prepare in two days? (2m)

- a. 7 l 500 ml
- b. 6 l 200 ml
- c. 5 l 100 ml
- d. 8 l 400 ml

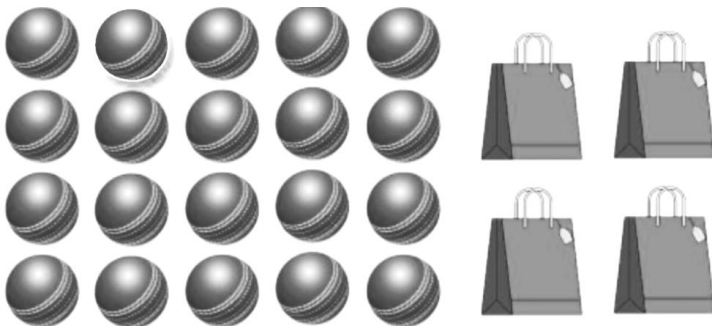
23. Shivesh buys 5 kg of rice. He consumes 3 kg of rice in a week. What fraction of rice is left with Shivesh at the end of the week? (2m)

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

24. There are 478 candies in a jar. If all candies are arranged into pairs of two, then how many pairs can be made? (2m)

- a. 489
b. 234
c. 546
d. 239

25. There are 20 balls to be put equally in 4 bags. How many balls will be there in each bag? (2m)



- a. 2
b. 3
c. 4
d. 5

Answer questions 26–27 based on the information given below.

Jack recorded the number of pizzas sold in a week in the table given below:

DAYS	NUMBER OF PIZZAS SOLD
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Key: One  = 5 Pizzas

26. How many more pizzas did Jack sell on Tuesday than on Monday? (2m)

- a. 10 b. 15 c. 20 d. 25

27. How many pizzas did he sell in the last 3 days of the week? (2m)

- a. 120 b. 100 c. 95 d. 110

28. Om planted few plants in the garden in rows. If number of plants in each row is five more than the total number of rows, which of the following can be the total number of plants planted by Om? (2m)

- a. 9×4
b. 13×15
c. 5×5
d. 3×7

29. The prices of three toys are: Toy X – ₹ 130, Toy Y – ₹ 200 and Toy Z – ₹ 150. Neha has ₹ 300. She wants to buy two toys. What can she buy? (2m)

- a. Toy X and Toy Y
b. Toy Y and Toy Z
c. Toy X and Toy Z
d. All three Toys

30. A chocolate bar is divided into 8 equal pieces. Priya eats 3 pieces and gives 2 pieces to her brother. What fraction of the chocolate bar is left? (2m)

- a. $\frac{2}{8}$ b. $\frac{3}{8}$ c. $\frac{5}{8}$ d. $\frac{6}{8}$

31. A shop opens at 9:30 a.m. and closes at 8:00 p.m. It remains closed for 1 hour 30 minutes during the afternoon. For how long is the shop open in total? (2m)

- a. 9 hours
b. 10 hours
c. 10 hours 30 minutes
d. 11 hours

32. Tina's dance classes are held every alternate day. If her first class is on Monday, 3rd March, when will her next class be? (2m)

- a. Tuesday, 4th March
b. Wednesday, 5th March
c. Monday, 10th March
d. Friday, 7th March

33. Seema makes a toy using a cone and a cube. Which statement is correct? (2m)

- a. The toy has 9 vertices altogether.
b. The toy has 8 vertices altogether.
c. The toy has 7 vertices altogether.
d. The toy has 6 vertices altogether.

34. Two children have equal-sized chocolate bars. Aditya eats $\frac{3}{6}$ of his chocolate, while Vishal eats $\frac{2}{6}$ of his chocolate. Who ate more chocolate? (2m)

- a. Aditya
b. Vishal
c. Both ate the same amount
d. Cannot be determined

35. Rohan is buying a pencil case for ₹ 158. The shopkeeper gives him the coins shown below as change. How much money did Rohan give the shopkeeper? (2m)

- a. ₹ 180
c. ₹ 200

- b. ₹ 190
d. ₹ 210



SECTION 4: Challenger's Section

36. Read the given statements carefully and select the CORRECT option. (4m)

Statement I: When 0 is added to any number, the result is the number itself.

Statement II: When a number is subtracted from itself, the result is the same number.

- a. Both Statement – I and Statement – II are true.
b. Statement – I is false but Statement – II is true.
c. Statement – I is true but Statement – II is false.
d. Both Statement – I and Statement – II are false.

37. Read the given statements carefully and select the CORRECT option. (4m)

Statement I: 7598 is less than 7958.

Statement II: 7598 is greater than 7958.

Statement III: 5978 is equal to 8795.

Statement IV: 9758 is less than 8579.

- a. Statements I, II and III are true.
b. Statements I and III are true.
c. Statements II and IV are true.
d. Only Statement I is true.

38. Read the given statements carefully and select the CORRECT option. (4m)

1. A square has four equal sides and four corners, and all its sides are straight.
 2. A triangle has three sides, three corners, and three straight edges.
 3. A circle has no corners and has a curved boundary all around it.
 4. A rectangle has four sides; adjacent sides are equal in length.
- a. Only statements 1 and 2 are true
b. Only statements 1, 2, and 3 are true
c. Only statements 2, 3, and 4 are true
d. All the statements are correct

The table below shows the number of runs scored by a team in 4 Matches. Based on the information answer question 39-40.

MATCH	NUMBER OF RUNS SCORED BY TEAM A
Match 1	         
Match 2	     
Match 3	  
Match 4	    

Key: One  = 5 runs

39. The coach wants the team to score at least 20 runs in all matches. In which match did the team fail to achieve this target? (4m)

- a. Only Match 2
- b. Match 2 and 3
- c. Only Match 3
- d. Match 3 and 4

40. Read the following statements and choose the correct option. (4m)

Statement I: The team needed to score 20 more runs in Match 2 to get the same number of runs as Match 1.

Statement II: The runs scored in Match 3 and 4 combined are equal to the runs scored in Match 1

- a. Both Statement – I and Statement – II are true.
- b. Statement – I is false but Statement – II is true.
- c. Statement – I is true but Statement – II is false.
- d. Both Statement – I and Statement – II are false.

