Student ID | | | | | | | | | | | |

Directorate of Education, GNCT of Delhi

Practice Paper (Mid-Term)

Session: 2025-26

Class – VII

Subject-Mathematics

Duration: $2\frac{1}{2}$ hours **Max. Marks: 60**

GENERAL INSTRUCTIONS:

Read the following instructions carefully and follow them:

1. This question paper has 16 questions. All questions are compulsory.
2. Question paper is divided into **FIVE** sections-Section A, B, C, D and E.
3. In section A-question number 1 has multiple choice questions (MCQs) of 1 mark each.
4. In section B-question number 2 to 7 are objective type questions of 02 marks each.
5. In section C-question number 8 to 10 are short answer (SA) type questions carrying 03 marks each.
6. In section D-question number 11 to 13 are long answer (LA) type questions carrying 05 marks each.
7. In section E-question number 14 to 16 are source based/case study questions carrying 04 marks each.
8. There is no overall choice. However, an internal choice has been provided in 1 question in Section B, 1 question in Section C, 2 questions in Section D and in each 2 marks questions in Section E.
9. Draw neat figures wherever required. Take $\pi = \frac{22}{7}$ wherever required if not stated.
10. Use of calculator is NOT allowed.
11. **Please write down the serial number of questions before attempting it.**

SECTION-A

Question 1 consists of Multiple-Choice Questions (i-xii) of 1 mark each. Choose the appropriate option from the given options: **$(12 \times 1 = 12)$**

1 (i) On the number line, the value of (–4) × 4 lies on right hand side of:

(a) –17 (b) –4

(c) 0 (d) 9

1 (ii) The range of the data 14, 6, 12, 17, 21, 10, 4, 3 is

(a) 21 (b) 17

(c) 18 (d) 11

1 (iii) Which of the following equations can be formed using the expression x = 5?

(a) 2x + 3 = 13 (b) 3x + 2 = 13

(c) x – 5 = 1 (d) 4x – 9 =21

1 (iv) If the complement of an angle is 79°, then the angle will be of:

(a) 11° (b) 79°

(c) 1° (d) 101°

1 (v) Which of the following is not the additive inverse of x ?

(a) $-(-x)$ (b) $x \times (-1)$

(c) $-x$ (d) $x \div (-1)$

1 (vi) Circumference of a circle is always:

(a) three times of its radius (b) three times of its diameter

(c) less than three times of its diameter (d) more than three times of its diameter

1 (vii) Out of the following which is a 3-D figure?

(a) Square (b) Sphere

(c) Triangle (d) Circle

1 (viii) If two supplementary angles are in the ratio 1 : 2, then the bigger angle is

(a) 120° (b) 125°

(c) 110° (d) 90°

1 (ix) The value of y for which the expressions (y – 15) and (2y + 1) become equal is:

(a) 0 (b) 16

(c) 8 (d) –16

1 (x) A wire is bent to form a square of side 22 cm. If the wire is re-bent to form a circle, its radius is

(a) 22 cm (b) 14 cm

(c) 7 cm (d) 11 cm

1 (xi) Area of a right-angled triangle is 30 cm^2. If its smallest side is 5 cm, then its hypotenuse is:

(a) 14 cm (b) 13 cm

(c) 12 cm (d) 11 cm

1 (xii) Which of the following pair of angles are supplementary?

(a) 48°, 42° (b) 60°, 60°

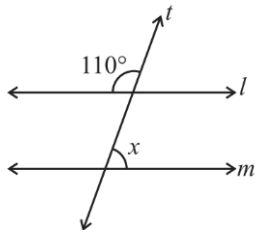
(c) 75°, 105° (d) 179°, 2°

SECTION-B

Question 2 to 7 are Objective Type Questions of 2 marks each **(6× 2 = 12)**

2. Draw all lines of symmetry for the following figure.

3. Find the value of x in the following figure if $l \parallel m$.



4. Express the given statement as an equation:

   "13 subtracted from twice of a number gives 3".

   OR

   Solve: 10p + 10 = 100

5. A cricketer scores the following runs in eight innings:

   58, 76, 40, 35, 46, 45, 0, 100.

   Find the mean score.

6. Height of a place A is 1800 m above sea level. Another place B is 700 m below sea level. What is the difference between the levels of these two places?

7. Find the mode and median of the data: 13, 16, 12, 14, 19, 12, 14, 13, 14

SECTION-C

Question 8 to 10 are Short Answer Type Questions of 3 marks each **(3× 3 = 9)**

8. The circumference of a circle is 31.4 cm. Find the radius and the area of the circle? (Take π = 3.14)

   OR

   How many times a wheel of radius 28 cm must rotate to go 352 m? (Take $\pi = \frac{22}{7}$)

9. Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age. What is Laxmi's age?

10. Two hundred students of 6th and 7th classes were asked to name their favourite colour so as to decide upon what should be the colour of their school building. The results are shown in the following table.

Favourite Colour	**Red**	**Green**	**Blue**	**Yellow**	**Orange**
Number of Students	40	20	60	30	50

    Represent the given data on a bar graph.

SECTION-D

Question 11 to 13 are Long Answer Type Questions of 5 marks each **(3× 5 = 15)**

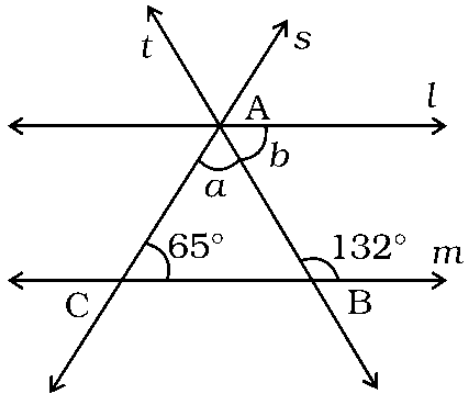
11. People of Sundargram planted trees in the village garden. Some of the trees were fruit trees. The number of non-fruit trees were two more than three times the number of fruit trees. What was the number of fruit trees planted if the number of non-fruit trees planted was 77?

OR

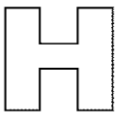
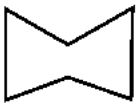
Match each of the entries in Column I with the appropriate entries in Column II

	Column I		**Column II**
(a)	x + 5 = 9	i.	$\frac{5}{3}$
(b)	x – 7 = 4	ii.	4
(c)	5x = 30	iii.	11
(d)	The value of y which satisfies 3y = 5	iv.	6
(e)	2x + 5 = 11	v.	3

12. In the figure given below, if $l \parallel m$, find the values of a and b.



13. Draw all lines of symmetry for each of the following figures as given below:

(a)  (b)  (c) 

SECTION-E

Question 14 to 16 are Source Based/Case Study Questions of 4 marks each **(3× 4 = 12)**

14. A school quiz competition awards +5 marks for every correct answer and −2 marks for every incorrect answer. No marks are given for unattempted questions. Riya answered 12 questions in total, out of which 8 were correct.

Based on the above information answer the following questions:

(i) How many marks did Riya score for the correct answers? 1

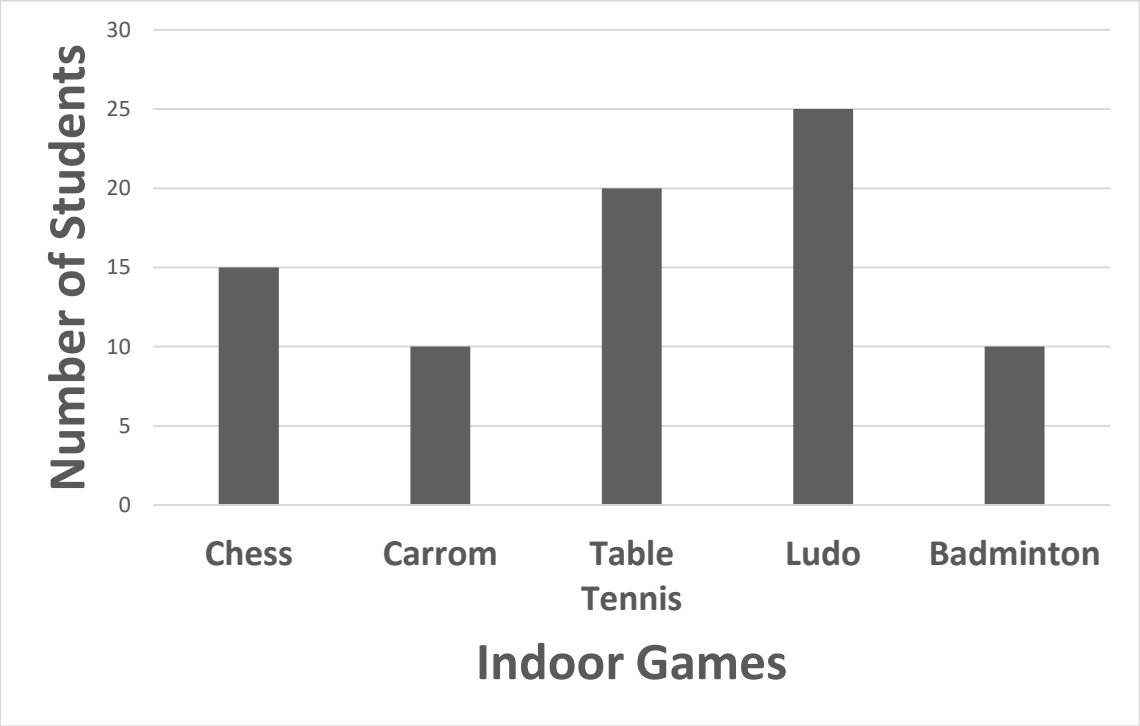
(ii) How many marks did she score for the incorrect answers? 1

(iii) Find her total score. 2

OR

If out of 12 questions answered, Riya had answered 7 correct. What would be her total score then?

15. A survey was conducted among 80 students about their favourite indoor games. The data is shown below in the form of a bar graph:



Based on the above information answer the following questions:

(i) Which game was preferred by the maximum number of the students? 1

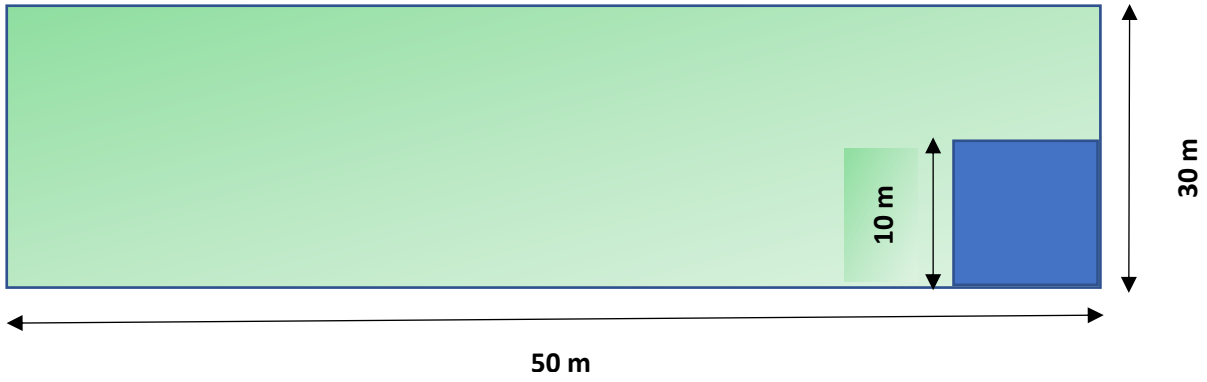
(ii) Which game was least preferred by the students? 1

(iii) Find the total number of students who preferred both table tennis and carrom. 2

OR

Find the sum of the students who preferred chess and badminton.

16. A rectangular park has a length of 50 m and a breadth of 30 m. Inside the park, there is a square flower bed of 10 m in one corner.



Based on the above information answer the following questions:

(i) Find the perimeter of the park. 1

(ii) Find the area of the square flower bed. 1

(iii) Find the area of the remaining part of the park after removing the flower bed. 2

OR

Find the sum of the areas of rectangular park and square flower bed.