

Mathematics
Sample Question Paper – 3
Class 7 (Ganita Prakash Part - I)

Time Allowed: 2 Hours 30 Minutes

Maximum Marks: 60

GENERAL INSTRUCTIONS

1. This question paper has 16 questions. All questions are compulsory.
2. The question paper is divided into FIVE sections - Section A, B, C, D and E.
3. In Section A, Question 1 contains twelve Multiple Choice Questions (MCQs) of 1 mark each.
4. In Section B, Questions 2 to 7 are Very Short Answer (VSA) type questions of 2 marks each.
5. In Section C, Questions 8 to 10 are Short Answer (SA) type questions carrying 3 marks each.
6. In Section D, Questions 11 to 13 are Long Answer (LA) type questions carrying 5 marks each.
7. In Section E, Questions 14 to 16 are source-based/case-study questions carrying 4 marks each.
8. There is no overall choice. Internal choice is provided in one question in Section B, one question in Section C, two questions in Section D and in the 2-mark sub-question of each case study in Section E.
9. Draw neat figures wherever required. Use ruler, compass and set-square wherever appropriate.
10. Use of calculator is not allowed.

SECTION – A

(Question 1 consists of Multiple-Choice Questions (i-xii) of 1 mark each.)

(12 × 1 = 12)

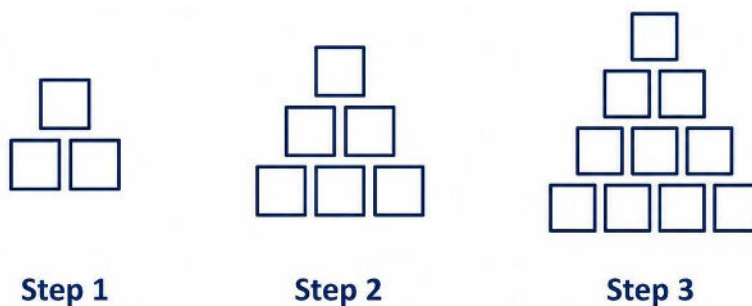
1 (i) In the numeral 4,05,08,700, the digit 5 represents:

- | | |
|-------------|----------------|
| (a) 5 lakh | (b) 5 thousand |
| (c) 50 lakh | (d) 5 crore |

1 (ii) The value of $9 \times (12 - 5)$ is:

- | | |
|--------|---------|
| (a) 58 | (b) 63 |
| (c) 72 | (d) 108 |

1 (iii) Observe the block pattern shown below. How many square blocks will there be in Step 4?



- | | |
|--------|--------|
| (a) 8 | (b) 10 |
| (c) 12 | (d) 15 |

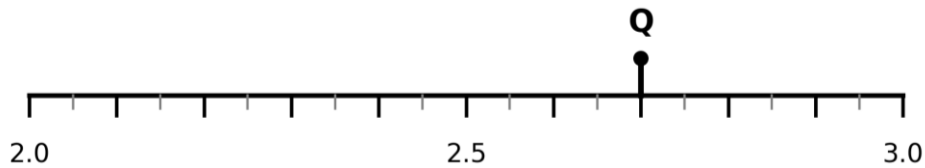
1 (iv) If one notebook costs ₹n and one pencil costs ₹p, then the cost of 3 notebooks and 4 pencils is:

- | | |
|-------------|-------------|
| (a) 7np | (b) 3n + 4p |
| (c) 4n + 3p | (d) np + 7 |

1 (v) The next term in the Virahāṅka sequence 5, 8, 13, 21, ... is:

- | | |
|--------|--------|
| (a) 29 | (b) 31 |
| (c) 34 | (d) 39 |

1 (vi) Point Q is marked on the number line below. Which decimal does Q represent?



(a) 2.6

(b) 2.7

(c) 2.8

(d) 2.9

1 (vii) Which pair of angles formed by intersecting lines are always equal?

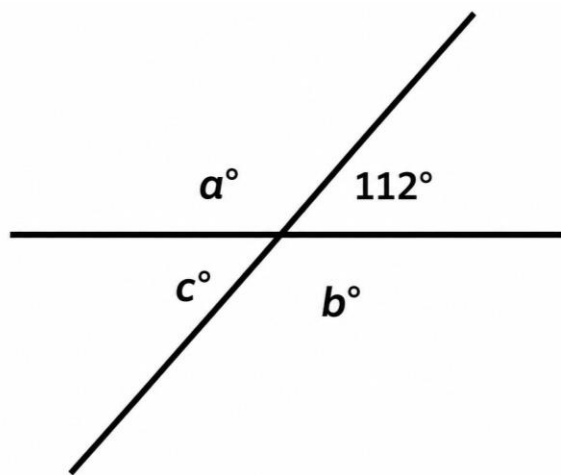
(a) Adjacent angles

(b) Linear pair

(c) Vertically opposite angles

(d) Complementary angles

1 (viii) In the figure below, find the value of a° .



(a) 68°

(b) 78°

(c) 112°

(d) 248°

1 (ix) Which set of lengths can form a triangle?

(a) 2 cm, 4 cm, 7 cm

(b) 3 cm, 5 cm, 9 cm

(c) 5 cm, 6 cm, 7 cm

(d) 4 cm, 4 cm, 9 cm

1 (x) The value of $\frac{2}{3} \times \frac{9}{4}$ is:

(a) $\frac{3}{2}$

(b) $\frac{8}{12}$

(c) $\frac{18}{12}$

(d) $\frac{11}{7}$

1 (xi) 325 paise is equal to:

(a) ₹0.325

(b) ₹3.25

(c) ₹32.50

(d) ₹325

1 (xii) Which is the smallest decimal number?

(a) 6.07

(b) 6.70

(c) 6.007

(d) 6.700

SECTION - B

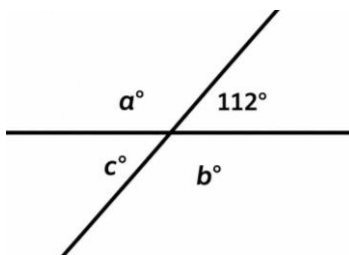
(Questions 2 to 7 are Very Short Answer Type Questions of 2 marks each.)

(6 × 2 = 12)

2. (a) Write 9,08,07,006 in words in the Indian place value system.
(b) Write the same number using commas in the International system.
3. Add brackets at appropriate places so that the expressions give the indicated values:
(a) $30 - 8 + 5 = 17$
(b) $42 - 6 \times 4 = 144$
4. (a) The length of a ribbon is 4.75 m. Another ribbon is 2.35 m long. Find their total length.

OR

4. (b) A fish tank contained 8.6 L of water. 3.45 L was removed. How much water remained?
5. A sandwich costs ₹s and a juice costs ₹j. Write an expression for the cost of 5 sandwiches and 3 juices. Also find the value of the expression for $s = 28$ and $j = 16$.
6. In the figure below, one angle is 112° . Find the other three angles a° , b° and c° .



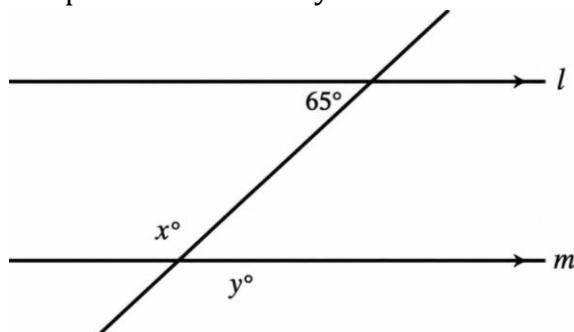
7. Which of the following decimals are equal?
5.2, 5.20, 05.200, 5.02, 5.2000, 5.002

SECTION - C

(Questions 8 to 10 are Short Answer Type Questions of 3 marks each.)

(3 × 3 = 9)

8. Compare the following pairs using $<$, $>$ or $=$. Give a brief reason for each.
(a) $47 \times (19 + 1)$ □ $47 \times 19 + 47$
(b) $120 - (35 + 15)$ □ $120 - 35 + 15$
(c) $24 \times 15 - 24 \times 5$ □ 24×10
9. In the figure below, l and m are parallel lines cut by a transversal. Find the values of x and y .



10. (a) The three angles of a triangle are x° , $(x + 20)^\circ$ and $(x + 40)^\circ$. Find x and all the three angles.

OR

10. (b) Seema bought 1.25 kg apples, 0.75 kg oranges and 2.5 kg bananas. Find the total weight of fruits bought by Seema.

SECTION - D

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

11. (a) A city library recorded 18,75,640 visitors in 2024 and 21,08,360 visitors in 2025.

(i) Find the increase in the number of visitors. **[2]**

(ii) Round both numbers to the nearest lakh. **[2]**

(iii) Using the rounded values, estimate the increase. **[1]**

OR

11. (b) A stadium has 1,18,500 seats. During three events, the attendance was 96,750; 1,05,200; and 1,11,900.

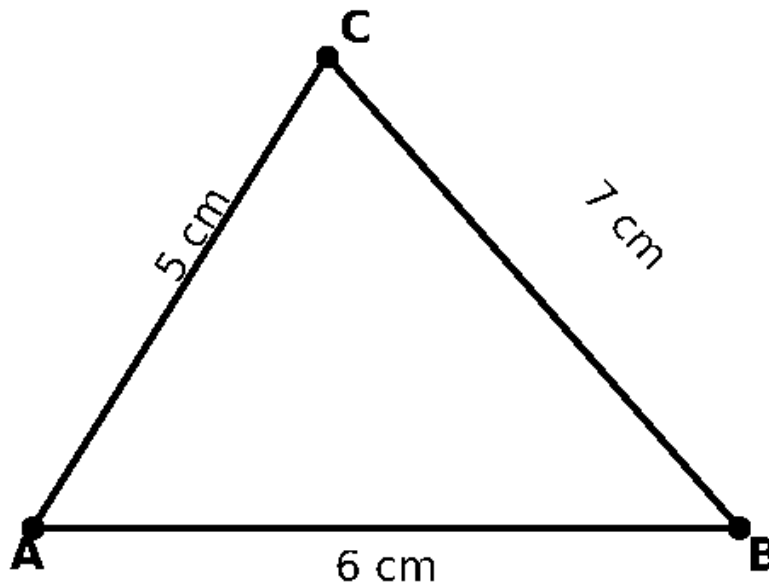
(i) Find the total attendance. **[2]**

(ii) Round each attendance to the nearest ten thousand and estimate the total. **[2]**

(iii) Which is larger: the exact total or the estimated total? **[1]**

12. Two consecutive numbers in the Virahāṅka sequence are 377 and 610. Find the next three numbers and the previous two numbers in the sequence.

13. Construct triangle ABC with $AB = 6$ cm, $BC = 7$ cm and $CA = 5$ cm. Then construct the altitude from B to AC. Write the main steps of construction.

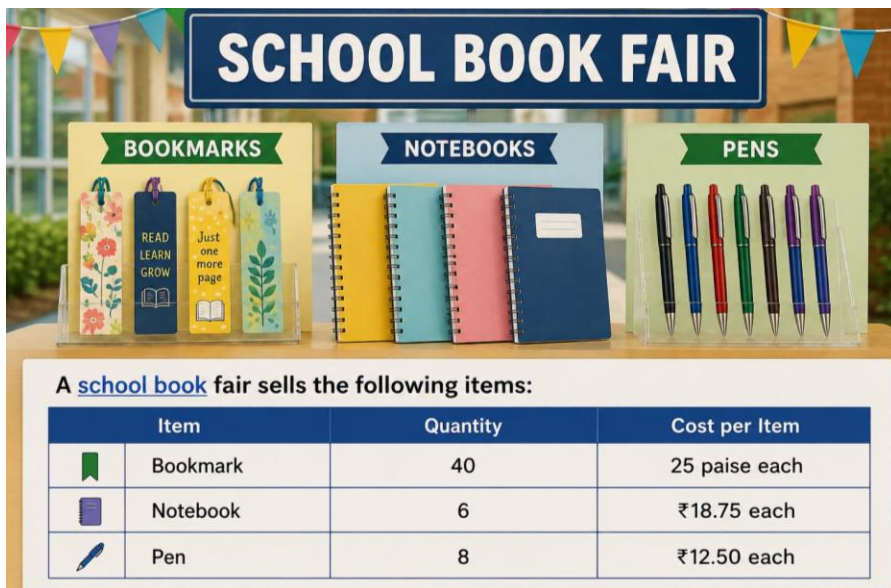


SECTION - E

(Questions 14 to 16 are Source-Based / Case-Study Questions of 4 marks each.)

(3 × 4 = 12)

14. School Book Fair



A school book fair sells the following items:

Item	Quantity	Cost per Item
 Bookmark	40	25 paise each
 Notebook	6	₹18.75 each
 Pen	8	₹12.50 each

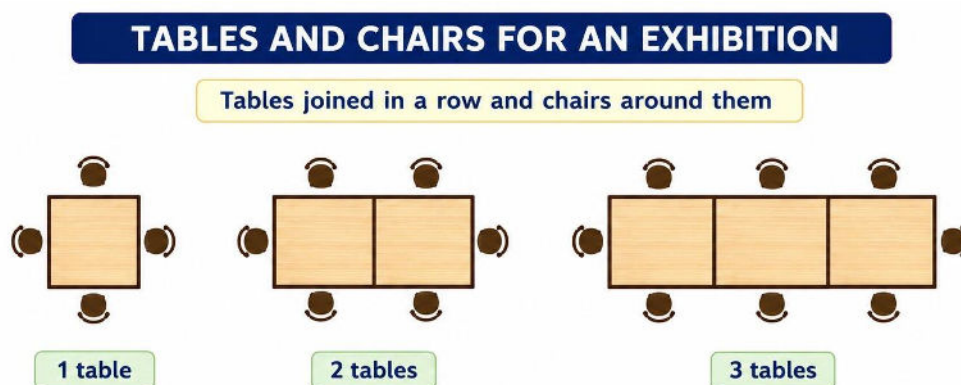
Based on the information given above, answer the following questions:

- (i) What is the total cost of 40 bookmarks in rupees? [1]
- (ii) What is the total cost of 8 pens? [1]
- (iii) (a) Find the total amount spent on 6 notebooks and 8 pens. [2]

OR

- (iii) (b) If the class had ₹250, how much money would remain after buying the 6 notebooks only? [2]

15. Tables and Chairs for an Exhibition



When square tables are joined end-to-end in a row, chairs can be placed only on the outer sides. One table needs 4 chairs, 2 tables need 6 chairs and 3 tables need 8 chairs.

Based on the pattern above, answer the following questions:

- (i) If t represents the number of tables, write an expression for the number of chairs needed. [1]
- (ii) How many chairs are needed for 18 tables in a row? [1]
- (iii) (a) If exactly 50 chairs are available, how many tables can be joined in one row? [2]

OR

- (iii) (b) Two rows are made, one with 7 tables and another with 9 tables. Find the total number of chairs needed for both rows. [2]

16. Sports Day Refreshment Stall



A stall has 36 litres of sharbat. Each jar is filled with $\frac{3}{4}$ litre sharbat. On the first day, $\frac{2}{3}$ of the total sharbat is sold.

Based on the information given above, answer the following questions:

- (i) How many full jars can be filled using the entire 36 litres? [1]
(ii) How many litres of sharbat were sold on the first day? [1]
(iii) (a) The remaining sharbat is divided equally among 8 jars. How many litres will be in each jar? [2]

OR

- (iii) (b) The remaining sharbat is divided equally among 6 jars. How many litres will be in each jar? [2]