

Mathematics

Sample Question Paper – 4

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.

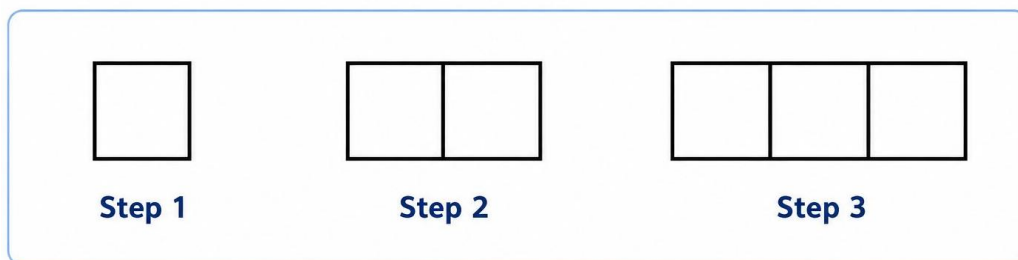
SECTION - A

(Question 1 consists of Multiple-Choice Questions (i-xii) of 1 mark each.) **(12 × 1 = 12)**

1 (i) 100 lakhs is equal to:

- | | |
|--------------|---------------|
| (a) 1 lakh | (b) 1 crore |
| (c) 10 crore | (d) 1 billion |

1 (ii) Observe the joined-square pattern below. How many matchsticks are needed for Step 4?



- | | |
|--------|--------|
| (a) 12 | (b) 13 |
| (c) 14 | (d) 16 |
- 1 (iii) Which expression is equal to $7 \times 23 + 7 \times 17$?
- | | |
|--------------------|--------------------|
| (a) 7×40 | (b) 7×6 |
| (c) 14×40 | (d) 23×17 |

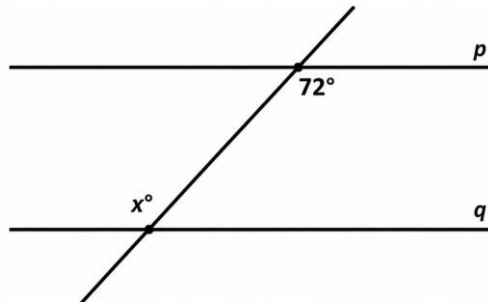
1 (iv) Which decimal is equal to $4 + 7/10 + 3/100$?

- | | |
|-----------|----------|
| (a) 4.073 | (b) 4.73 |
| (c) 4.703 | (d) 47.3 |

1 (v) The expression for the perimeter of a square of side a is:

- | | |
|-------------|----------|
| (a) $a + 4$ | (b) $4a$ |
| (c) a^2 | (d) $2a$ |

1 (vi) In the figure below, $p \parallel q$. The value of x is:



- (a) 72° (b) 108°
(c) 90° (d) 144°

1 (vii) The sum of an odd number and an even number is always:

- (a) odd (b) even
(c) zero (d) prime

1 (viii) Which set of lengths cannot form a triangle?

- (a) 4, 5, 6 (b) 5, 5, 8
(c) 3, 4, 5 (d) 2, 3, 6

1 (ix) The value of $5/8 \div 15/16$ is:

- (a) $2/3$ (b) $3/2$
(c) $5/15$ (d) $1/6$

1 (x) The next term of the Virahāṅka sequence 8, 13, 21, 34, ... is:

- (a) 47 (b) 55
(c) 68 (d) 89

1 (xi) 3.6 kg is equal to:

- (a) 360 g (b) 3,600 g
(c) 36,000 g (d) 0.36 g

1 (xii) Which number is nearest to 8,00,000?

- (a) 7,96,500 (b) 8,54,000
(c) 7,40,000 (d) 8,90,000

SECTION - B

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

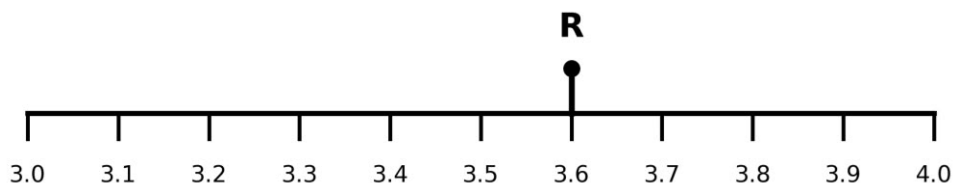
(6 × 2 = 12)

2. Write 56,08,304 in words in the Indian place value system. Also write its number name in the International system.

3. Simplify:

- (a) $72 - (18 + 24)$ (b) $6 \times (15 - 7)$

4. Point R is marked on the decimal scale below. Write the decimal represented by R. Also write it as a fraction with denominator 10.



5. A school bus charges ₹b per student and a museum ticket costs ₹m per student. Write an expression for the total cost for 8 students. Find its value if $b = 35$ and $m = 50$.

6. Determine whether each result is odd or even without carrying out full multiplication:

(a) 27×46

(b) 19×35

7. (a) Find $2\frac{3}{5} + 1\frac{7}{10}$.

OR

7. (b) Find $5\frac{1}{4} - 2\frac{2}{3}$.

SECTION - C

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

(3 × 3 = 9)

8. Study the parity grid below.

(a) Find the parity (odd/even) of the sum of each row.

(b) Find the parity of the sum of all nine numbers.

7	12	5
8	3	10
11	6	9

9. Compare the following using $<$, $>$ or $=$. Give a brief reason.

(a) $52 \times (18 + 2) \square 52 \times 18 + 104$

(b) $90 - (27 + 13) \square 90 - 27 + 13$

(c) $31 \times 44 - 31 \times 14 \square 31 \times 30$

10. (a) Two parallel lines are cut by a transversal. One corresponding angle is 118° . Find the two distinct angle measures that occur around the two intersections and explain.

OR

10. (b) A shop sold 3.75 kg rice in the morning, 2.6 kg in the afternoon and 4.85 kg in the evening. Find the total rice sold.

SECTION - D

(Questions 11 to 13 are Long Answer Type Questions of 5 marks each.)

(3 × 5 = 15)

11. (a) A city had 47,86,350 people in 2011 and 53,24,880 people in 2021.

(i) Find the increase in population. [2]

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

(iii) Estimate the increase using the rounded values. [1]

OR

11. (b) A factory packed 8,75,600 bottles in January, 9,18,450 in February and 7,96,300 in March.

(i) Find the total number of bottles packed. [2]

(ii) Round each number to the nearest lakh and estimate the total. [2]

(iii) State whether the estimate is more or less than the exact total. [1]

12. (a) A ribbon of length 12 m is cut into pieces of length $\frac{3}{4}$ m each.

(i) How many complete pieces can be made? [2]

(ii) If 5 pieces are used, what length of ribbon is used? [2]

(iii) What length remains? [1]

OR

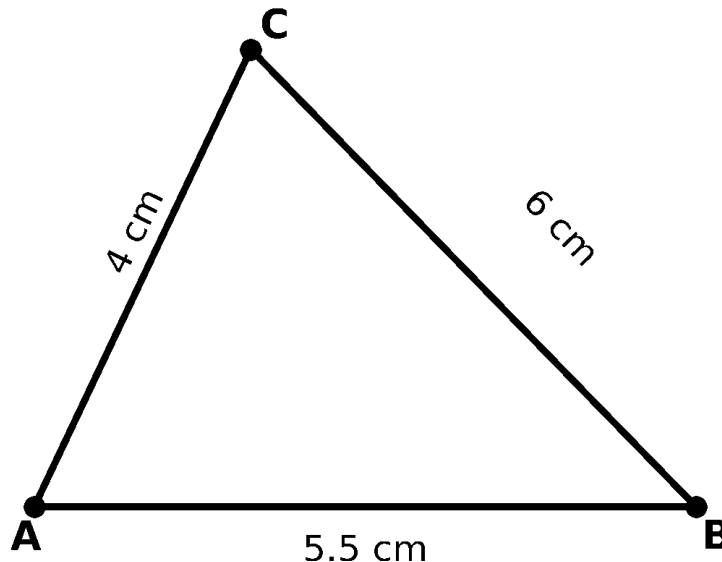
12. (b) A cyclist covers $\frac{7}{8}$ km in one minute.

(i) How far does she cover in 12 minutes? [2]

(ii) How many minutes are needed to cover 21 km? [2]

(iii) Is $\frac{7}{8}$ less than or greater than 1? [1]

13. Construct triangle ABC with AB = 5.5 cm, AC = 4 cm and BC = 6 cm. Then construct the altitude from C to AB. 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 Canteen

SCHOOL CANTEEN

IDLI



JUICE



FRUIT



The school canteen has the following prices:

Item	Price per Item
 Idli plate	₹28.50
 Juice glass	₹18.75
 Fruit bowl	₹35.25

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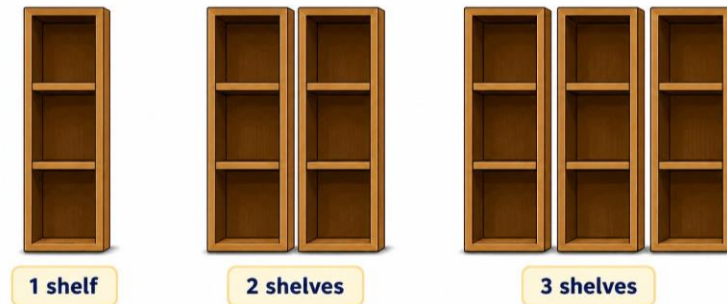
Based on the information above, answer the following:

- (i) Find the cost of 4 juice glasses. **[1]**
- (ii) Find the cost of 2 fruit bowls. **[1]**
- (iii) (a) Find the total cost of 3 idli plates and 2 fruit bowls. **[2]**

OR

- (iii) (b) A student has ₹200. How much money remains after buying 4 juice glasses and 2 idli plates? **[2]**

15. Library Shelf Pattern



A library arranges vertical shelves in a row. One shelf can hold 12 books. Each additional shelf also holds 12 books. Let s represent the number of shelves.

Based on the information above, answer the following:

- (i) Write an algebraic expression for the number of books that can be stored in s shelves. [1]
- (ii) How many books can be stored in 15 shelves? [1]
- (iii) (a) If 288 books are to be stored, how many shelves are required? [2]

OR

- (iii) (b) Two library sections have 9 shelves and 14 shelves. How many books can they hold altogether? [2]

16. Community Garden Partition

Community Garden Partition

Half A

Half B

$\frac{1}{3}$ of A	$\frac{1}{4}$ of B
$\frac{1}{3}$ of A	$\frac{1}{4}$ of B
$\frac{1}{3}$ of A	$\frac{1}{4}$ of B
$\frac{1}{3}$ of A	$\frac{1}{4}$ of B

A rectangular community garden is divided into two equal halves A and B. Half A is divided into 3 equal parts. Half B is divided into 4 equal parts.

Based on the diagram above, answer the following:

- (i) What fraction of the whole garden is one small part of A? [1]
- (ii) What fraction of the whole garden is one small part of B? [1]
- (iii) (a) Find the fraction of the whole garden covered by one part of A and one part of B together. [2]

OR

- (iii) (b) Find the fraction of the whole garden covered by two parts of A and one part of B together. [2]