



**ANANDALAYA**  
**PERIODIC TEST – 3**  
**Class: VII**

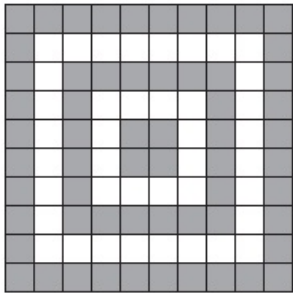
Subject: Mathematics  
Date : 07- 01-2025

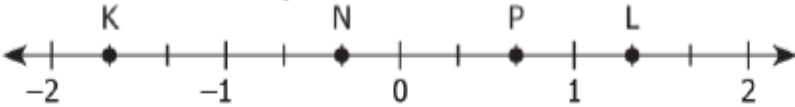
M.M: 40  
Time: 1 Hr.30mins

**General Instructions:**

- (1) This question paper contains 21 questions. All questions are compulsory.
- (2) This question paper is divided into 4 sections – A, B, C and D.
- (3) In Section-A, Questions 1 – 9 are multiple choice questions (MCQ's) each of 1 mark.
- (4) In Section-B, Questions 10 – 15 are very short- answer type questions carrying 2 marks each.
- (5) In Section-C, Questions 16 – 20 are short- answer type questions carrying 3 marks each.
- (6) There is no overall choice. However, an internal choice has been provided in 2 questions in Section- B and 2 questions in Section-C.
- (7) Question 21 in Section D is a case study-based question carrying 4 marks with subparts of values of 1, 1 and 2 marks respectively.
- (8) Use of calculators is not allowed.
- (9) Draw neat and clean figures wherever required.
- (10) Take  $\pi = 22/7$  wherever required if not stated.

**Section-A**

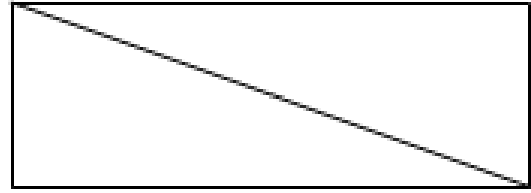
1. The interest on a sum of ₹2500 for 4 years at the interest rate 4 % is \_\_\_\_\_. (1)  
(A) ₹ 100                      (B) ₹200                      (C) ₹300                      (D) ₹400
  2. The ratio of 6 kg to 400 g is \_\_\_\_\_. (1)  
(A) 10 : 1                      (B) 15 : 1                      (C) 12 : 1                      (D) 6 : 1
  3. The percent that represents the unshaded region in the figure given is \_\_\_\_\_. (1)  
(A) 75%                      (B) 50%  
(C) 40%                      (D) 60%
- 
4. Which of the following is the standard form of  $\frac{-42}{56}$ ? (1)  
(A)  $\frac{-3}{4}$                       (B)  $\frac{3}{4}$                       (C)  $\frac{-6}{8}$                       (D)  $\frac{6}{8}$
  5. The alphabets on the number line below represent rational numbers. Which option shows the correct comparison of the rational numbers? (1)  



  
(A)  $K > N > P > L$       (B)  $L > P > N > K$       (C)  $K > L > P > N$       (D)  $N > P > L > K$
  6. Length of the tape required to cover the edges of a semi-circular disc of radius 10 cm is \_\_\_\_\_. (1)  
(Take  $\pi = 3.14$ )  
(A) 62.8 cm                      (B) 51.4 cm                      (C) 31.4 cm                      (D) 15.7 cm

7. Which is the greatest number in the following? (1)  
 (A)  $\frac{-1}{2}$  (B) 0 (C)  $\frac{1}{2}$  (D) 2

8. Consider a rectangle, divided into two equal triangles. The length of the rectangle is twice its breadth. If the length is 14 cm, what is the area of each triangle?



- (A)  $21\text{ cm}^2$  (B)  $49\text{ cm}^2$   
 (C)  $98\text{ cm}^2$  (D)  $196\text{ cm}^2$

9. A statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices. (1)

**A:** Rectangular wire of length 40 cm and breadth 20 cm is bent in the shape of a square. The side of the square is 30 cm.

**R:** Side of square =  $2(40 + 20) / 4 = 30\text{ cm}$

- (A) Both A and R are true and R is the correct explanation of A.  
 (B) Both A and R are true but R is not the correct explanation of A.  
 (C) A is true but R is false.  
 (D) A is false but R is true.

### Section-B

10. Represent  $\frac{-12}{7}$  on the number line. (2)

11. Find the whole quantity if 5% of it is ₹ 750. (2)

**OR**

(A) Convert  $\frac{3}{40}$  to percents

(B) Divide 150 chocolates between Roy and Simran in the ratio of 2 : 3.

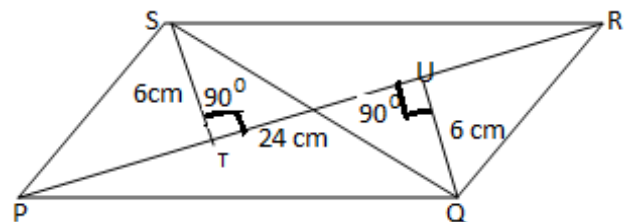
12. Find the circumference of a wheel whose radius is 63 cm. Find the distance covered by it while taking 50 rounds. (2)

**OR**

Find the area of the square whose perimeter is 160 m.

13. 800 kg of mortar consists 55% sand, 33% cement and rest lime. What is the mass of lime in mortar? (2)

14. Find the area of the parallelogram PQRS, if  $PR = 24\text{ cm}$  and  $QU = ST = 6\text{ cm}$ .



15. The population of a city decreased from 25000 to 24500. Find the decrease percentage (2)

### Section-C

16. (A) (i) A cricket team played 40 matches in one season. It won 25% of them. How many matches did they win? Also, find the number of matches lost by the team. (3)  
 (ii) Rita spends 90% of her salary. If her savings is ₹ 900, find her salary.

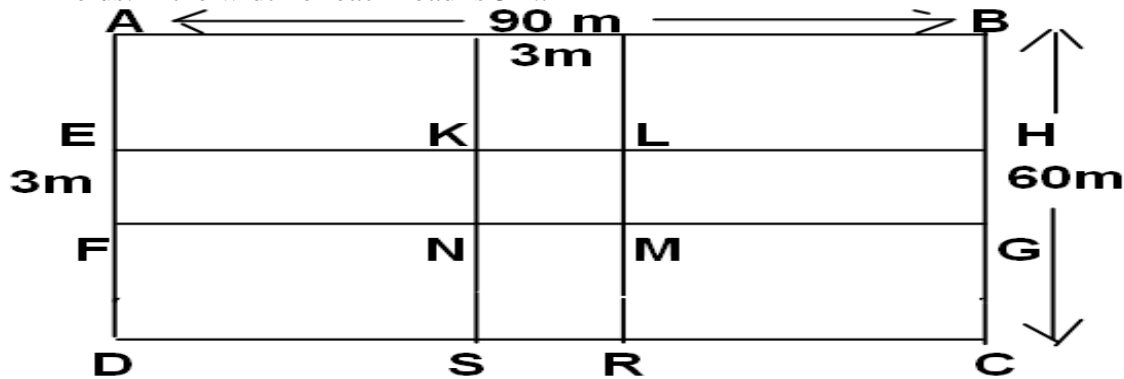
**OR**

(B) By selling an article for ₹ 24000, shopkeeper makes profit of 20%, find the cost price of the article.

17. Ranu and Gauri deposited ₹ 3000 and ₹ 4000 in a company at the rate of 10% per annum for 3 years and  $2\frac{1}{2}$  years respectively. Find the difference of the interest received by them. (3)

18. Evaluate:  $5\frac{13}{28} \div 2\frac{19}{49}$  (3)

19. (A) Through a rectangular field of length 90 m and breadth 60 m, two roads are constructed which are parallel to the sides and cut each other at right angles through the centre of the fields. If the width of each road is 3 m. (3)



- Find: (i) The area covered by roads.  
(ii) The cost of constructing the roads at the rate of ₹110 per  $m^2$ .

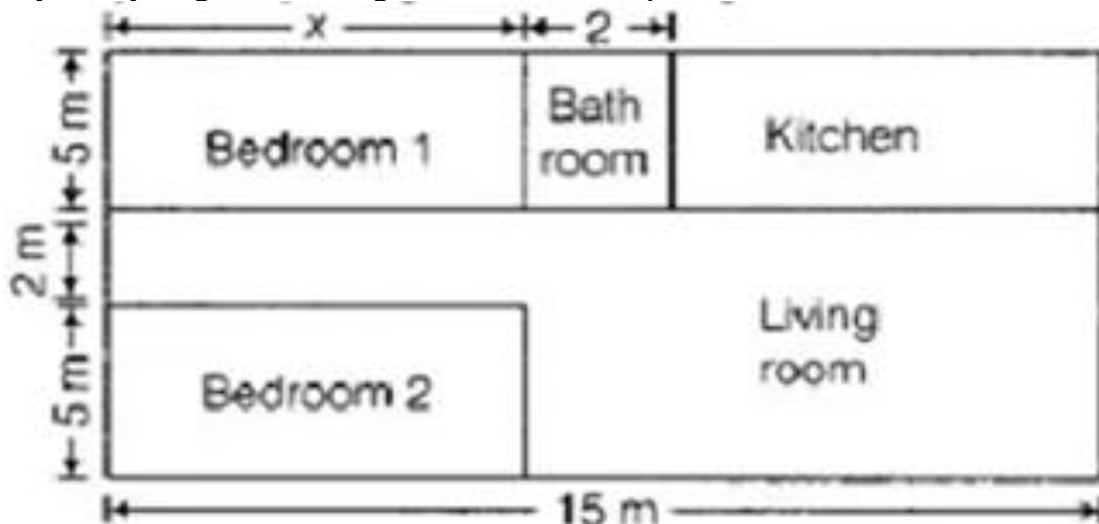
OR

- (B) The circumference of a circle is 31.4 cm. Find the radius and area of the circle. (Take  $\pi = 3.14$ ).

20. List three rational numbers between  $\frac{-5}{7}$  and  $\frac{-3}{8}$ . Write them in simplest form. (3)

#### Section-D

21. Study the layout given in the figure and answer the questions. (4)



- (i) If the floor area of each bedroom is 35 sq. metre, then find the value of  $x$ .  
(ii) Calculate the perimeter of the living room.  
(iii) If the cost of carpeting is ₹ 50 per sq. m, find the total cost of carpeting both the bedrooms.