T

FIRST TERM SUMMATIVE EXAMINATION - 2024

Standard - VII

Reg.No. | | | | | | |

Time: 2.00 hrs. **MATHEMATICS** *Marks:60*

PART - A

I. Choose the best answer: **10×1=10**

1. 11 × (-1) = _____.
   a) -1 b) 0 c) +1 d) -11
2. Which of the following does not represent an Integer?
   a) 0 ÷ (-7) b) 20 ÷ (-4) c) (-9) ÷ 3 d) 12 ÷ 5
3. In a parallelogram, if all the sides are equal then it is called _____.
   a) Rectangle b) Trapezium c) Rhombus d) Triangle
4. The area of a parallelogram whose base 12m and height 8m is _____.
   a) 69sq.m b) 99 sq.m c) 66 sq.m d) 96 sq.m
5. An algebraic expressions which is equivalent to the verbal statement, "Five times the sum of a and b" is _____.
   a) 5(a+b) b) 5 + a + b c) 5a+b d) a + 5b
6. When we subtract 'a' from '-a', we get _____.
   a) 0 b) 2a c) -2a d) -a
7. If Mani buys 5kg of potatoes for ₹ 75 then he can buy ___ kg of potatoes for ₹ 105.
   a) 6 b) 7 c) 8 d) 5
8. 12 cows can graze a field for 10 days. 20 cows can graze the same field for _____ days.
   a) 15 b) 18 c) 6 d) 8
9. Vertically opposite angles are _____.
   a) not equal in measure b) complementary
   c) supplementary d) equal in measure
10. A line which intersects two or more lines in different points is known as _____.
    a) parallel lines b) transversal c) non-parallel lines d) intersecting line

II. Fill in the blanks: **5×1=5**

11. 71 + _____ = 0
12. When the non-parallel sides of a trapezium are equal then it is known as _____.
13. The additive inverse of -15xy is _____.
14. The sum of all angles at a point is _____.
15. A tetromino is a shape obtained by _____ squares together.

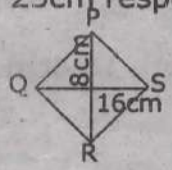
III. Match the following: **5×1=5**

16. 0 ÷ 3 - ½ h(a+b)
17. (-3) ÷ 3 - 0
18. The numerical coefficient of 3xy - ½ × d_1 × d_2
19. Area of a Rhombus - 1 $\frac{1}{2}(d_1+d_2)$
20. Area of a Trapezium - -1

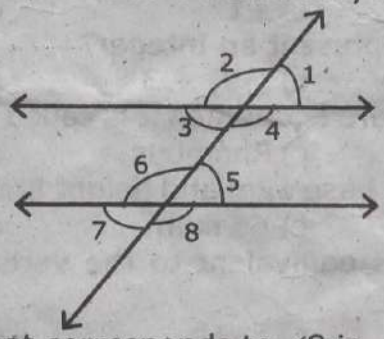
PART - B

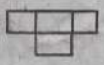
IV. Answer any 10 questions: **10×2=20**

21. Find the value using number line 7 - (-10)
22. Find 4 pairs of integers that add up to 2.
23. Prove that (-7) × (+8) is an integer and mention the property.
24. (-400) divided into 10 equal parts gives?
25. Find the height 'h' of the parallelogram whose area and base are 368 sq.cm and 23cm respectively.
26. Find the area of Rhombus.



27. The parallel sides of a trapezium are 23cm and 12cm. The distance between the parallel sides is 9cm. Find the area of the trapezium.
28. Subtract 3m - 7n from m+n
29. Solve : 2x + 10 = 30
30. Find the value of 3m + 2n given that m = 2 and n = -1.
31. A dozen bananas costs ₹ 20. What is the price of 48 bananas?
32. Two angles are in the ratio 3 : 2. If they are linear pair, Find them.

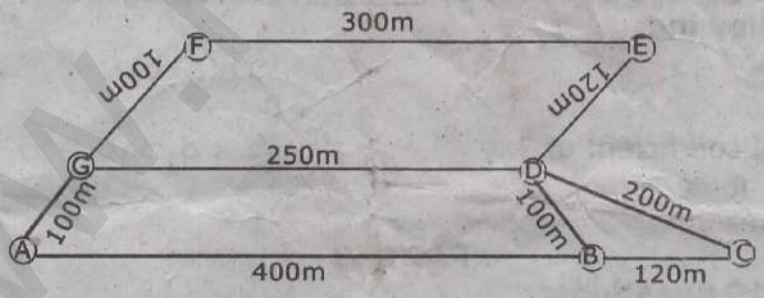


33. i) The angle that corresponds to ∠8 is _____.
    ii) The angle that is alternate interior to ∠3 is _____.
34. i) Rotation of Tetromino  in 180° is _____.
    ii) Rotation of Tetromino in  360° is _____.

PART - C

V. Answer any 5 questions: **5×3=15**

35. Add : i) (-48) + (-15) ii) 0 + (-95) iii) 20 + (-72)
36. Prove that [(-2) × 3] × (-4) = (-2) × [3×(-4)]
37. A ground is in the shape of parallelogram. The height of the parallelogram is 14m and corresponding base is 8m longer than its height. Find the cost of levelling the ground at the rate of ₹ 15 per sq.m
38. Simplify : (x+y-z) + (3x - 5y + 7z) - (14x + 7y - 6z)
39. 9 added to thrice a whole number gives 45. Find the number.
40. 60 workers can spin a bale of cotton in 7 days. In how many days will 42 workers spin it?
41. The angles at a point are x°, 2x°, 3x°, 4x°, 5x°. Find the value of the largest angle.
42.



Observe the picture and answer the following:
i) Find all the possible routes from A to D.
ii) Find the shortest distance between E and C.

PART - D

VI. Answer any 1 of the following : **1×5=5**

43. Construct bisector of the ∠ABC with the measure 80°.
44. Construct a perpendicular bisector of the line segment CD of length 10.4cm.
