SUMMATIVE ASSESSMENT – THIRD TERM

MATHEMATICS

Max. Marks: 60

Std - VII

Time: 2 Hrs

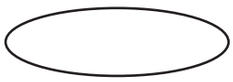
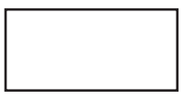
I. Choose the correct answer: **5 x 1 = 5**

1. Row 0 of the Pascal triangle is _____.
   a) 0 b) 1 c) 11 d) 101
2. 7^2 = _____.
   a) 14 b) 40 c) 49 d) 27
3. Pentagon has _____ sides.
   a) 5 b) 6 c) 7 d) 8
4. The objects that do not follow symmetry are said to be _____ figures.
   a) Reflection symmetry b) Rotation symmetry c) Line of symmetry d) Asymmetry
5. A Regular Heptagon has _____ lines of symmetry.
   a) 5 b) 6 c) 7 d) 8

II. Fill in the blanks with suitable answers: **5 x 1 = 5**

6. A _____ is the cursor of the LOGO language.
7. An _____ is a step-by-step procedure to solve a problem.
8. Every element in the Pascal triangle is obtained by finding the _____ of the two numbers above it.
9. A _____ shows the shortest distance from one place to another place.
10. The numbers in the second diagonal of the Pascal triangle is _____ numbers.

III. Match the following: **5 x 1 = 5**

11.  - Process
12.  - Connector
13. - Decision making
14.  - Display the Result
15.  - Start / End

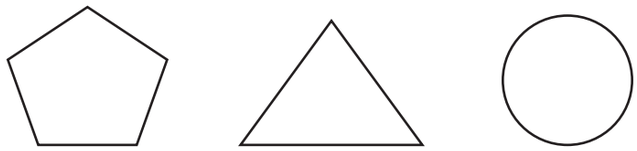
IV. State whether the following statements are True or False: **5 x 1 = 5**

16. Circle has only 2 lines of symmetry.
17. The Rectangle has rotational symmetry of order 2.
18. Dominoes are made of two equal squares joined edge to edge.
19. Only 9 rows are possible in Pascals triangle.
20. Stop is the last step in Algorithm.

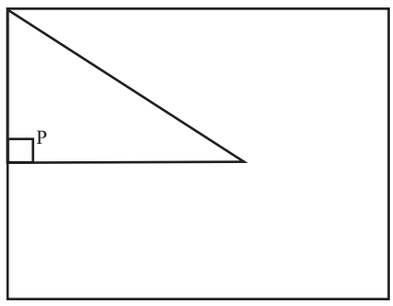
V. Answer any 10 questions: **10 x 2 = 20**

21. Define square numbers with an example.
22. Express 60 as the sum of triangular numbers.
23. Define asymmetry and symmetry with a neat diagram.

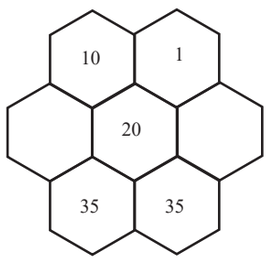
24. Draw the lines of symmetry, for the following figures.

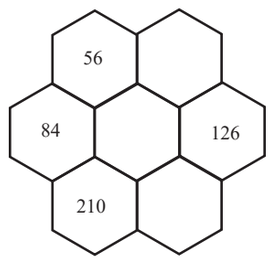


25. Draw the reflection of the triangle in the given line.



26. Mention the different types of polyominoes.
27. What is a route map?
28. Portions of the Pascal triangle are given below. Fill in the missing numbers in each case.





29. What is the sum of the numbers in Row 8 of the Pascal triangle? Write it as a power of 2.
30. Write an Algorithm to find the perimeter of a rectangle.
31. Write a flow chart to find the circumference of a circle.
32. Define the hockey stick pattern property of the Pascal triangle with a neat diagram.

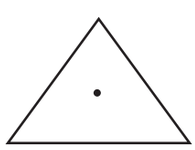
VI. Answer the following: (Any 4) **4 x 5 = 20**

33. Write the commands for Logo Turtle as an Algorithm for the given problems.

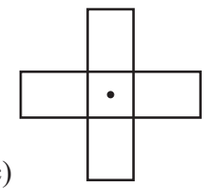
    (i) Draw a Rectangle.

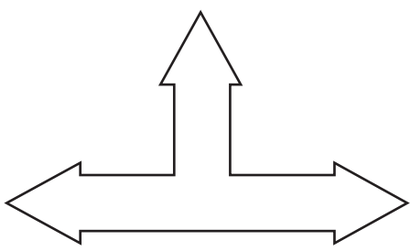
    (ii) Draw an Equilateral triangle.

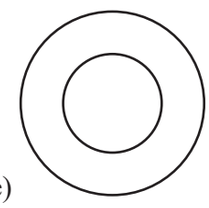
34. Write the 5 basic symbols used in the flow chart and explain each.
35. Write an Algorithm to find the taller of two persons and draw a flowchart for the same.
36. Write the order of symmetry and the angle of rotation symmetry. The shapes are rotated about the center point.

a) 

b) 

c) 

d) 

e) 

37. Highlight any four properties of the Pascal triangle and give a brief explanation of each.