HSL **SECOND TERM SUMMATIVE ASSESSMENT - 2025**

7 - Std   **MATHEMATICS**   ☐☐☐☐☐☐

Time : 2.00 Hrs

Marks : 60

I   Choose the correct answer.   5 X 1 = 5

1. to convert grams into kilograms, we have to divide it by
    a) 10000   b) 1000   c) 100   d) 10

2. Between which two numbers 1.8 lie?
    a) 2 and 3   b) 3 and 4   c) 1 and 2   d) 1 and 7

3. The formula to find the width of the circular path is   a) (L - l) units
    b) (B - b) units   c) (R - r) units   d) (r – R) units

4. The angles of a triangle are in the ratio 2 : 3 : 4. The angles are
    a) 20, 30, 40   b) 40, 60, 80   c) 80, 20, 80   d) 10, 15, 20

5. The elements along the sixth row of the Pascals triangle is   a) 1, 5, 10, 5, 1
    b) 1, 5, 5, 1   c) 1, 5, 5, 10, 5, 5, 1   d) 1, 5, 10, 10, 5, 1

II   Say true or false.   5 X 1 = 5

6. 78.56 < 78.57.
7. Area of a rectangle is lb sq.units.
8. a^3b^2 and a^2b^3 are equal.
9. The exterior angles of a triangle add upto $360°$.
10. Polygons are formed by increasing the number of sides.

III Fill up the blanks.   5 X 1 = 5

11. The place value of 7 in 0.37 is ....
12. The circumference of a circle is C = ... units.
13. The degree of $6x^7 – 7x^3 + 4$ is ....
14. The value of $(14 \times 21)^0$ is ....
15. The sum of all angles in a triangle is ....

IV   Match the following.   5 X 1 = 5

16. The Area of a circle   -   1 metre
17. Area of the circular path -   16
18. 100 cm   - πr^2 sq.units
19. $(-4)^2$ - a^{m+n}
20. $a^m \times a^n$ - $\pi (R^2 – r^2)$ sq.units

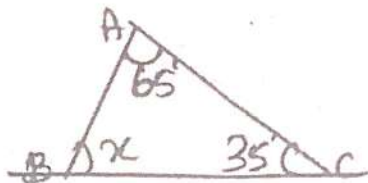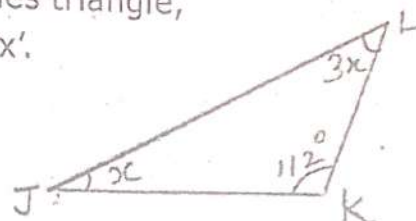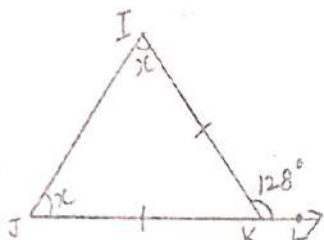**V   Answer any 10 questions.**   10 X 2 = 20

21. Convert 0.04 into simplest fraction.
22. Arrange the decimal numbers in ascending order 2.35, 2.53, 5.32, 3.52, 3.25.
23. Convert the franction into decimal $3\frac{1}{2}$.
24. Compare 99.56 and 99.65.
25. The diameter of a circular well is 4.2m, what is its circumference.

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26. Find the area of the circle of radius 21cm. (use π = 3.14).
27. If the circumference of a circle is 132m, then calculate the radius.
28. Simplify $3^3 \times 3^2 \times 3^4$ using product rule of exponents.
29. Add and find the degree of the expressions. $(3m^2n + 4pq^2)$ and $(5nm^2 - 2q^2p)$.
30. Identify the like terms $2x^2y, 2xy^2, 3xy^2, 14x^2y, 7yx$.

31. Find the value of 'x'.

32. In the given isoceles triangle, find the value of 'x'.

33. Find the value of 'x'.

34. What is the sum of the elements of 9th row in the Pascal's triangle?
35. Can the given angles $56^0, 64^0, 60^0$ from a triangle?

VI   Answer any five questions.   5 X 3 = 15
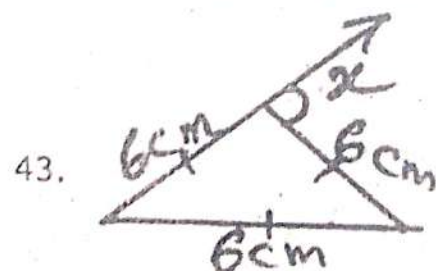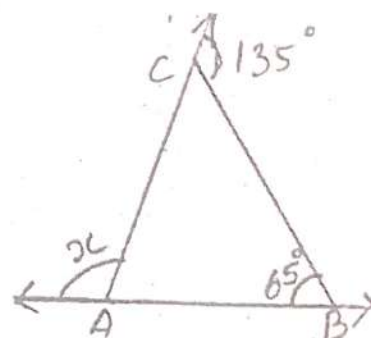
36. Expand the decimal number 658.37.
37. Calculate the circumference of a bangle whose diameter is 6cm.

38. Write the following as decimal number $300 + 5 + \dfrac{7}{10} + \dfrac{9}{100} + \dfrac{2}{100}$.

39. The diameter of a bullock cart wheel is 1.4m. Find the distance covered by it in 150 rotations.

40. Express 512, base 2 in exponential form.

41. Simplify : $\dfrac{4^5 \times a^8 \times b^3}{4^3 \times a^5 \times b^2}$.

42. Find the value of 'x' in the given triangle ABC.

43.

Using the diagram, find the value of 'x'.

VII   Answer any one of the following.   1 X 5 = 5

44. Construct a triangle ABC with, AB = 7 cm. AC = 6.5 cm, and $\lfloor A = 120^0$.
45. Construct a triangle XYZ with XY= 6.4cm, ZY = 7.7 cm and XZ = 5cm.