COMMON SECOND TERM SUMMATIVE EXAMINATION - 2025

Standard - VII

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

I Choose the correct answer: **5x1=5**

1. To convert grams into kilograms, we have to divide it by.

   a) 10000 b) 1000 c) 100 d) 10

2. The simplest fractional form of 0.35 is

   a) $\frac{35}{1000}$ b) $\frac{35}{10}$ c) $\frac{7}{20}$ d) $\frac{7}{100}$

3. Formula used to find the area of a circle is

   a) $2\pi r$ units b) πr^2+2r units c) πr^2 sq.units d) πr^3 cu.units

4. a x a x a x a x a is equal to

   a) a^5 b) 5^a c) 5a d) a+5

5. If two place figures are congruent, then they have

   a) same size b) same shape

   c) same angle d) same shape and same size

II Fill in the blanks **5x1=5**

6. 37.70 ☐ 37.7

7. Radius of a circle is _____ of diameter.

8. Unit digit of 124 x 36 x 980 is _____

9. The sum of all the three angles in a triangle is _____

10. The degree of $6x^7-7x^3+4$ is _____

III Match the following: **5x1=5**

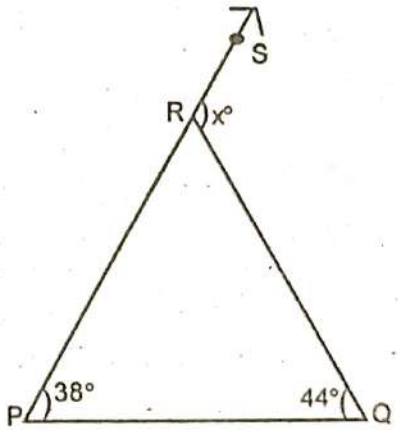
11. 419 cm	-	0.6
12. Circumference of the circle	-	4.19m
13. $6^2 \times 6^m = 6^5$	-	obtuse angle
14. 120°	-	$2\pi r$
15. $\frac{3}{5}$	-	m=3

IV Say True (or) False. 5x1=5

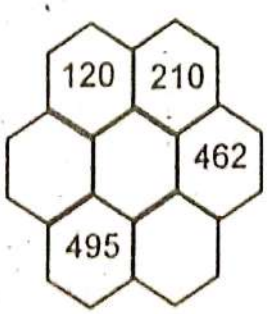
16. The decimal number which lies between 4 and 5 is 3.5.
17. Area of a circle of radius 'n' units is πn^2 sq.units.
18. $2^\circ = (10000)^\circ$
19. Each angle of an equilateral triangle is of equal measure.
20. Half of 2^{10} is 2^5.

V Write any 10 of the following. 10x2=20

21. Express the following in meters using decimals
    i) 16cm ii) 6m 6cm
22. Find the decimal form of $23+\frac{6}{10}+\frac{8}{1000}$
23. Express the decimal number 3.56 into fraction.
24. What is the circumference of the circular disc of radius 14cm?
25. Simplify using product rule of exponents $3^3 \times 3^2 \times 3^4$
26. Find the value of $(-4)^3$
27. Can 30°, 60° and 90° be the angles of a triangle?
28. In ΔPQR, find the exterior angle $\angle SRQ$



29. Fill in the missing numbers in the Pascal's Triangle.



30. Arrange the following decimals in ascending order.

    123.45, 123.54, 125.43, 125.34, 125.3

31. If a=3, and b=2, then find the value of the following (1) $(a-b)^a$

32. Identify the like terms,

    $12x^3y^2z$, $-y^3x^2z$, $4z^3y^2x$, $6x^3z^2y$, $-5y^3x^2z$

33. Express 729 in Exponential Form.

VI Answer any 5 of the following. 5x3=15

34. Represent the following decimal numbers on the number line.

    i) 1.7 ii) 2.1

35. Express the following fractions as decimal numbers.

    i) $\frac{3}{5}$ ii) $\frac{5}{100}$

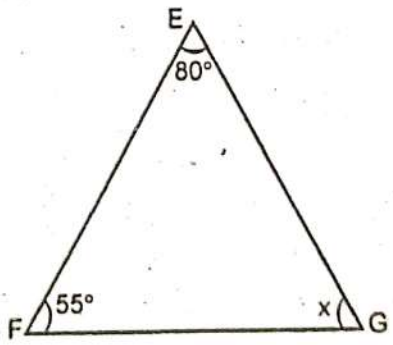
36. The radius of a tractor wheel is 77cm. Calculate the distance covered by it in 35 rotations.

37. A floor is 10m long and 8m wide. A carpet of size 7m long and 5m wide laid on the floor. Find the area of the floor that is not covered by the carpet.

38. Simplify using power rule of exponents

    i) $(2^6)^2 \times (2^4)^7$ ii) $(8^3)^4$

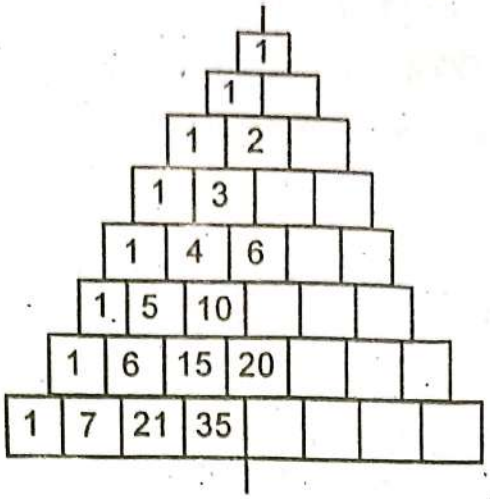
39. Find the value of x°



40. Simplify and fixed the degree of the expression

    $(4m^2+3n)-(3m+9n^2)-(3m^2-6n^2)+(5m-n)$

41. Complete the Pascal's Triangle by taking the numbers 1,2,6,20 as line of Symmetry.



VII Answer any one of the following. **1x5=5**

42. a) Construct an equilateral triangle xyz of side 7.5cm.

(OR)

b) Construct a triangle ABC with AB=7cm, AC=6.5cm and $\angle A = 120°$.

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