COMMON SECOND TERM SUMMATIVE EXAMINATION - 2024

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Standard - VII

Reg.No. | | | | | | |

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. In the formula, $C=2\pi r$, 'r' refers to
   a) circumference b) area c) rotation d) radius
3. a x a x a x a x a is equal to
   a) a^5 b) 5^a c) 5a d) a+5
4. The angles of a triangle are in the ratio 2:3:4. Then the angles are
   a) 20, 30, 40 b) 40, 60, 80 c) 80, 20, 80 d) 10, 15, 20
5. The elements along the 6^{th} row of the Pascal's 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 Fill in the blanks **5x1=5**

6. The decimal number of $\frac{3}{5}$ is _____
7. The formula used to final the area of the circle is _____ sq. units.
8. Unit digit of 124 x 36 x 980 is _____
9. To draw a triangle, we need _____ measurements.
10. The sum of the elements of nineth row in the Pascal's triangle is _____

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

11. 0.009	-	11
12. The area of the circular path	-	πd
13. The degree of $a^3b^2c^4d^2$	-	0.00900
14. Criterion for congruence triangle	-	$\pi(R^2-r^2)$
15. Circumference of the circle	-	(S-A-S)

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

16. 1.7 lies between 1 and 2.

17. The area of the rectangular path = (LB-lb) sq.units.

18. $2° = (1000)°$

19. The sum of three angles of the triangle is 360°.

20. $7a^2b$ and $-7ab^2$ are like terms.

V Answer any 10 questions:- 10x2=20

21. The height of a person is 165cm. Express this height in metre.

22. Arrange the following in ascending order.

    2.35, 2.53, 5.32, 3.52, 3.25

23. Write the decimal number 132.105 in the place value table.

24. Find the circumference of the circular disc of radius 14cm.

25. Find the area of a hula loop whose diameter is 28cm.

26. A rectangular garden has dimensions 11m x 8m. A path of 2m wide has to be constructed along its sides. Find the area of the path.

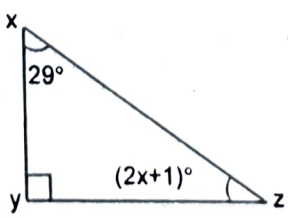
27. Find the value of i) $(-7)^2$ ii) $(-4)^3$

28. Identify the like terms:

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

29. Find the value of $\frac{(-1)^6 \times (-1)^7 \times (-1)^8}{(-1)^3 \times (-1)^5}$

30. In the figure find the value of x.



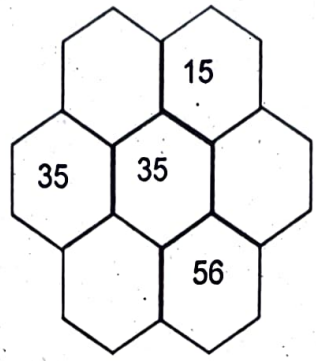
31. If $\Delta ABC \cong \Delta DEF$, List all the corresponding

    i) Congruent sides ii) congruent angles

32. In an isosceles triangle one angle is 76°. If the other two angles are equal find them.

33. Write the first five numbers and their squares in the third slanting row of the Pascal's Triangle.

34. The following hexagonal shape are taken from Pascal's Triangle. Fill in the missing numbers.



VI Answer any 5 of the following questions: **5x3=15**

35. Write the following decimal numbers in the place value table.

    i) 25.178 ii) 0.025 iii) 428.001

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

    i) 0.3 ii) 2.1

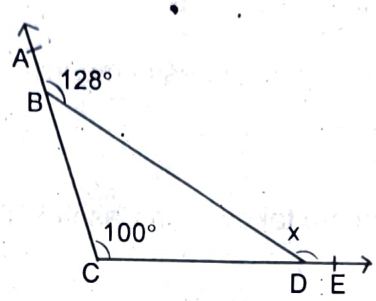
37. The radius of a tractor wheel is 77cm. Calculate the distance covered by it in 35 rotations.

38. The circumference of a circular park is 352m. Find the area of the park.

39. Express 512 in the exponential form.

40. If $x = 5x^2+7x+8$ and $y=4x^2-7x+3$, then find the degree of $x+y$.

41. Find the value of 'x' in the given figure.



42. Can row sum of elements in Pascal's Triangle form a pattern?

VII Answer any one question: **1x5=5**

43. a) Construct an equilateral triangle of side 7.5cm.

(Or)

b) Construct a triangle PQR with given conditions.

$\angle Q = 90°$, $\angle R = 42°$ and QR = 5.5cm

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