Roll 651

T

COMMON SECOND TERM SUMMATIVE EXAMINATION - 2024

Standard - VII   Reg.No. ☐☐☐☐☐☐

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

PART - A

I. Choose the best answer : $10 \times 1 = 10$

1. The simplest form of 0.15 is _____.

   a) $\dfrac{15}{1000}$ b) $\dfrac{15}{10}$ c) $\dfrac{3}{20}$ d) $\dfrac{5}{100}$

2. The decimal number which lies between 4 and 5 is _____.
   a) 4.5   b) 2.9   c) 1.9   d) 3.5

3. 0.009 = _____.
   a) 0.90   b) 0.090   c) 0.00900   d) 0.900

4. In the formula, $c = \pi d$, 'd' refers to _____.
   a) circumference   b) radius   c) area   d) diameter

5. The ratio of the area of a circle to the area of its semicircle is _____.
   a) 2 : 1   b) 1 : 2   c) 4 : 1   d) 1 : 4

6. The formula to find the area of the circular path is _____.
   a) $\pi (R^2 - r^2)$ sq. units b) πr^2 sq. units c) $2\pi r^2$ sq.units d) $\pi r^2 + 2r$ sq.units

7. No.of Zeros are there in 100^{10} _____.
   a) 2   b) 3   c) 10   d) 20

8. The degree of $6x^7 - 7x^3 + 4$ is _____.
   a) 7   b) 3   c) 6   d) 4

9. If two plane figures are congruent, then they have _____.
   a) Same Size   b) Same Shape
   c) Same angle   d) Same shape and Same Size

10. What is the sum of the elements of nineth row in the Pascal's Triangle?
    a) 128   b) 254   c) 256   d) 126

II. Fill in the blanks: $5 \times 1 = 5$

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

12. The formula used to find the area of the circle is _____.

13. The value of $(7 \times 3)^0$ is _____.

14. The coefficient of leading term of the expression $3z^2 y + 2x - 3$ is _____.

15. Sum of all the three angles in a triangle is _____.

III. True or False : $5 \times 1 = 5$

16. $7 + \dfrac{1}{100} + \dfrac{8}{1000} = 7.108$

17. Circumference of a circle is always more than three times of its diameter.

18. $2^3 < 3^2$

19. Degree of the constant term is 1.

20. A triangle can have two obtuse angles.

PART - B

IV. Answer any 10 questions: $10 \times 2 = 20$

21. Express in metre : 16cm

22. Write $3 + \dfrac{8}{10} + \dfrac{4}{100} + \dfrac{5}{1000}$ as decimal number.

23. Compare : i) 5.05 ☐ 5.50   ii) 0.99 ☐ 1.9

24. Represent 2.1 on the number line.
25. What is the circumference of the circular disc of radius 14cm?
26. Find the area of the circle of radius 21cm.
27. Find the area of the dining whose diameter is 105 cm.
28. Find the value of $2^3 + 3^2$
29. Express the given number using exponential form : 512.
30. Find the degree of the following terms : i) $-3p^3q^2$ ii) -125
31. Find the unit digit of 11^{10}
32. Find the value of $x°$.
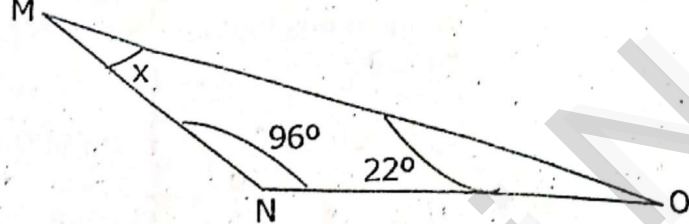
33. Convert into decimal number : $\dfrac{3}{2}$
34. Given that $\triangle ABC \equiv \triangle DEF$. List all the corresponding congruent sides.
35. Express the following in exponential form : $5 \times 5 \times 7 \times 7 \times 7$

PART - C

V. Answer any 5 questions: 5×3=15

36. Arrange the following in ascending order : 2.35, 2.53, 5.32, 3.52, 3.25
37. Write the following decimal as fractions: i) 0.04   ii) 6.4   iii) 0.75
38. The radius of a tractor wheel is 77cm. Calculate the distance covered by it in 35 rotations?
39. A picture of length 23cm and breadth 11cm is painted on a chart, such that there is a margin of 3cm along each of its sides. Find the total area of the margin.

40. Simplify : $\dfrac{2^8 \times 3^5 \times 5^4}{3^3 \times 5^3 \times 2^4}$

41. Add the expressions $4x^2 + 3xy + 9y^2$ and $2x^2 - 9xy + 6y^2$ and find the degree.
42. If the three angles of a triangle are in the ratio 3 : 5 : 4, then find them.
43. Complete the Pascal's Triangle.
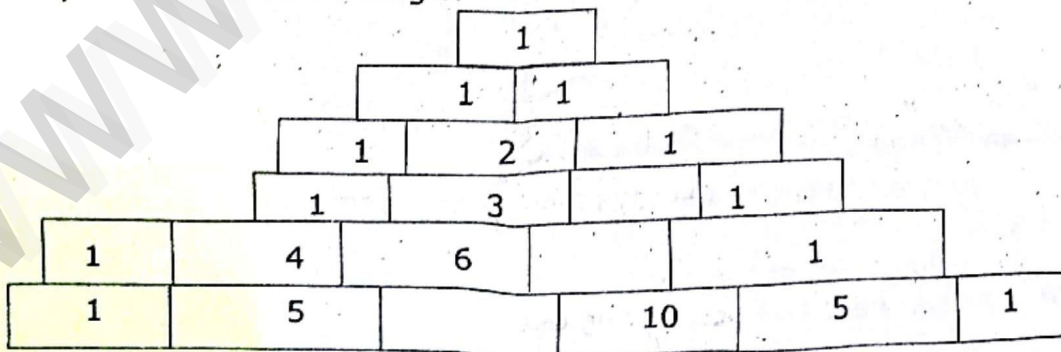
PART - D

VI. Answer Any one question: 1×5=5

44. Draw a triangle LMN given that LM = 5.5cm, $\angle M = 70°$ and $\angle L = 50°$.
(OR)
Draw a triangle ABC given that BC = 8cm, AC = 6cm and $\angle C = 40°$.