HSS

SECOND TERM SUMMATIVE ASSESMENT - 2024

7 - Std

MATHEMATICS

Time : 2.00 hrs

Marks : 60

PART - A

I Choose the correct answer. 5 X 1 = 5

1. A cricket pitch is about 264 cm wide. It is equal to ..... m.
   a) 26.4 b) 2.64 c) 0.264 d) 0.0264
2. If the circumference of a circle is 82π. Then value of `r' is ..... .
   a) 21 cm b) 20cm c) 41cm d) 82cm
3. The unit digit of $(32 \times 65)^0$ is
   a) 2 b) 5 c) 0 d) 1
4. The exponential form of 72 is
   a) 7^2 b) 2^7 c) $2^3 \times 3^3$ d) $2^3 \times 3^2$
5. What is the sum of the element of ninth row in the Pascals triangle
   a) 128 b) 254 c) 256 d) 126

II Say true or false. 5 X 1 = 5

6. $45.50 > 45.55$.
7. Circumference of a circle $C = 2\pi r$ units.
8. $3^4 \times 3^7 = 3^{11}$.
9. Area of a rectangle is A = /b sq.units.
10. The sum of the interior angles in a triangle is 180^0.

III Fill up the blanks. 5 X 1 = 5

11. The degree of the constant term is ..... .
12. Area of the circle is ..... sq. units.
13. The quotient rule of exponents $\frac{a^m}{a^n}$ = ...
14. The value of $(-4)^2$ = ...
15. Each angle of an equilateral triangle is of ..... measure.

IV Match the following. 5 X 1 = 5

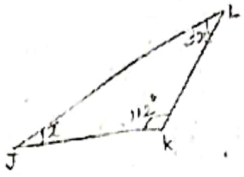
16.	100 cm	-	a^{m+n}
17.	Area of the circular path	-	1
18.	Product rule $a^m \times a^n$	-	5
19.	$(14 \times 21)^0$	-	$\pi(R^2 - r^2)$
20.	The degree of $12pq^2r^2$	-	1 metre

PART - B

V Answer any 10 questions. 10 X 2 = 20

21. Find the decimal form of the fraction $999 + 99 + 9 + \frac{9}{10} + \frac{9}{100}$.
22. Find the circumference of a circle whose radius is 49cm.

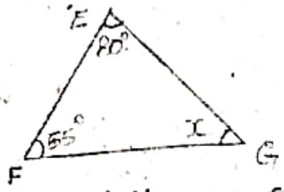
23. Arrange the following in ascending order 2.35, 2.53, 5.32, 3.52,3.25.
24. Find the area of the hula lamp whose diameter is 28cm $\left(\pi = \frac{22}{7}\right)$.
25. Find the value of $2^2 + 5^2$.
26. Simplify : $5^7 \times 5^3$.
27. Can 5cm, 9cm and 14cm be the sides of a triangle?
28. Express in exponential form 5 X 5 X 7 X 7 X 7.
29. Find the value of `x'.



30. 

In ΔPQR, find the exterior angle $\angle SRQ$.

31. The circumference of a circle is 1760cm, find the radius.
32. Add (9x + y) and (10x - 9y) and find the degree.
33. Can you draw a triangle with 25°, 65° and 80° as angles.
34. Find the value of `x'.

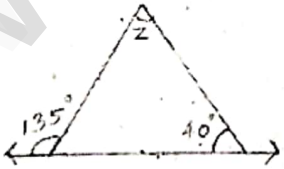


35. Find the elements along the sixth row of Pascals triangle.

PART - C

VI Answer any 5 questions. 5 X 3 = 15

36. Express 512 in exponential form.
37. If the circumference of the circle is 132m. Then calculate the radius and the diameter.
38. Express 729 in exponential form.
39. Simplify : $\frac{2^8 X 3^5 X 5^4}{3^3 X 5^3 X 2^4}$.
40. Add the expression $4x^2 + 3xy + 9y^2$ and $2x^2 - 9xy + 6y^2$.
41. If P = -2, Q = 1 and r = 3 find the value of $3p^2q^2r$.
42. Find the angle Z.



43. Can row sum of elements in a Pascal's triangle form a pattern.

PART - D

VII Answer any one. 1 X 5 = 5

44. Construct a triangle XYZ, XY = 6.4 cm, ZY = 7.7cm and XZ = 5cm.
45. Construct a ΔABC, BC = 8 cm, AC = 6cm, and $\angle C = 40°$.