

Dr. A. Venkula, Principal, Kumbakonam - Thanjavur District

HSS

SECOND TERM SUMMATIVE ASSESSMENT - 2024

7 - Std

MATHEMATICS

--	--	--	--	--	--

Marks : 60

Time : 2.00 hrs

PART - A

I Choose the correct answer.

5 X 1 = 5

- 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
- If the circumference of a circle is 82π . Then value of 'r' is
a) 21 cm b) 20cm c) 41cm d) 82cm
- The unit digit of $(32 \times 65)^0$ is
a) 2 b) 5 c) 0 d) 1.
- The exponential form of 72 is
a) 7^2 b) 2^7 c) $2^3 \times 3^3$ d) $2^3 \times 3^2$
- 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

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

III Fill up the blanks.

5 X 1 = 5

- The degree of the constant term is
- Area of the circle is sq. units.
- The quotient rule of exponents $\frac{a^m}{a^n} = \dots\dots\dots$
- The value of $(-4)^2 = \dots\dots\dots$
- 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.

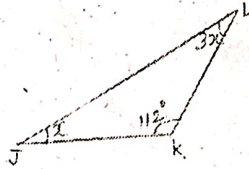
10 X 2 = 20

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

HSS 7 கணிதம் PAGE - 1

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 $5 \times 5 \times 7 \times 7 \times 7$.

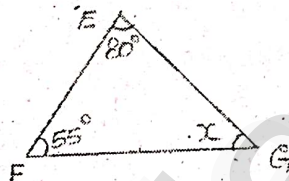
29. Find the value of 'x'.



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 : $\frac{2^8 \times 3^5 \times 5^4}{3^3 \times 5^3 \times 2^4}$.
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, $ZY = 7.7$ cm and $XZ = 5$ cm.
45. Construct a ΔABC , $BC = 8$ cm, $AC = 6$ cm, and $\angle C = 40^\circ$.