

Class : 7Register
Number**SECOND TERM - SUMMATIVE ASSESSMENT(SA) - 2024-25**

Time Allowed : 2.00 Hours]

MATHEMATICS

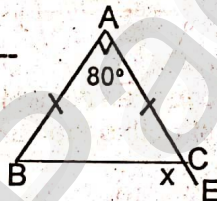
[Max. Marks :60

PART - I

- I. Choose the correct Answer. **YouTube/ Akwa Academy** 10x1=10
- To convert grams into Kilograms, We have to divide it by
(a) 10000 (b) 1000 (c) 100 (d) 10
 - The decimal number which lies between 4 and 5 is -----
(a) 4.5 (b) 2.9 (c) 1.9 (d) 3.5
 - In the formula, $C = 2\pi r$, 'r' refers to
(a) Circumference (b) Area (c) Rotation (d) Radius
 - 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
 - The value of x in the equation $a^{13} = x^3 \times a^{10}$ is
a) a (b) 13 (c) 3 (d) 10
 - The unit digit of $(32 \times 65)^0$ is
a) 2 (b) 5 (c) 0 (d) 1
 - An exterior angle of a triangle is 70° and two interior opposite angles are equal. Then measure of each of these angle will be
a) 110° (b) 120° (c) 35° (d) 60°
 - If two plane figures are congruent then they have
a) same size (b) same shape
c) same angle (d) same shape & same size
 - Which of the following rule is not sufficient to verify the congruency of two triangles.
a) SSS rule (b) SAS rule (c) SSA rule (d) ASA rule
 - The elements along the sixth row 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:

- $\frac{3}{5} = \dots\dots\dots$ 5x1=5
- The formula used to find the area of the circle is -----sq. units.
- Degree of the Constant term is -----
- In a $\triangle ABC$, $AB = AC$.
The value of x is -----



- Measure of each angle in an Equilateral Triangle -----

III. Match the following.

- $\frac{5}{100}$ - a^{m-n} 5x1=5
- Circumference of a Circle - 360°
- Sum of exterior angles in a triangle - πd
- $\frac{a^m}{a^n}$ - Sum of interior opposite angles
- Exterior angle of a Triangle - 0.05

PART - II

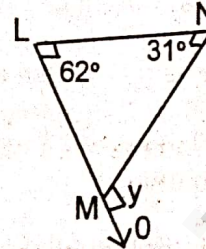
IV. Answer any 10 questions.

- Convert the following in to centimetre. 10x2=20
(i) 9mm (ii) 8cm and 9mm
- Convert the following into decimals. (i) $\frac{3}{5}$ (ii) $\frac{5}{100}$

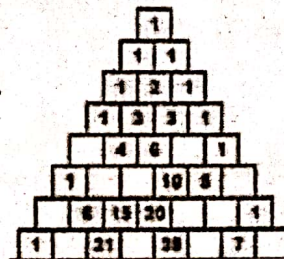
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23. Velan bought 8.36 kg of Potato and Sekar bought 6.29kg of Potato. Which is heavier.
 24. Find the circumcentre of a circle whose radius is 49cm.
 25. Find the area of circle whose radius is 21cm ($\pi=3.14$)
 26. A Floor is 10m long and 8m wide. A carpet of size 7m long and 5m wide is laid on the floor. Find the area of the floor that is not covered by the carpet.
 27. Find the value of $2^3 + 3^2$.
 28. Evaluate the following. (i) $(-3) \times (-2)^3$ (ii) $(-2)^3 \times (-10)^3$.
 29. Find the unit digit of the large numbers. (i) 9^{12} (ii) 49^{17}
 30. In the ΔSTU , $SU=UT$, $\angle SUT = 70^\circ$, $\angle STU = x$, then find the value of x .

31. In ΔLMN , LM is extended to O .
 If $\angle L=62^\circ$ and $\angle N=31^\circ$, Find $\angle NMO$.



32. Complete the Pascal's Triangle.

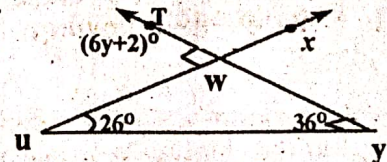


33. Find the area of the dining table whose diameter is 105cm. (OR)
 If $p=-2$, $q=1$ and $r=3$, Find the value of $3p^2q^2r$.

PART - III

5x3=15

- V. Answer any 5 of the following questions. Question NO.41 is Compulsory.
34. Write each of the following as decimals.
 (i) Four hundred four and five hundredths.
 (ii) Two and Twenty five Thousandths.
35. Arrange the following in ascending order and descending order.
 17.35, 71.53, 51.73, 73.51, 37.51
36. Kannan divides a circular disc of radius 14cm into four equal parts. What is the Perimeter of a quadrant shaped disc. ($\pi = \frac{22}{7}$)
37. A canal of width 1m is constructed all along inside the field which is 24m long and 15m wide. Find (i) The area of the canal (ii) the cost of constructing the canal at the rate of ₹12 per sq.m.
38. Simplify using laws of exponents.
 (i) $a^4 \times a^{10}$ (ii) $2^5 \div 2^3$ (iii) $(x^m)^0$ (iv) $3^y \times 12^y$
39. If $x = 5x^2 + 7x + 8$ and $y = 4x^2 - 7x + 3$, Then find the degree of $x+y$.
40. With the given data find $\angle UWY$.
 What do you infer about $\angle XWY$.



41. Find the decimal form of the following fractions.

(i) $153 + 96 + 7 + \frac{5}{10} + \frac{2}{1000}$

(ii) $999 + 99 + 9 + \frac{9}{10} + \frac{9}{100}$

(iii) $23 + \frac{6}{10} + \frac{8}{1000}$

(OR)

Simplify and find the degree of the expression, $(4m^2+3n) - (3m+9n^2) - (3m^2-6n^2) + (5m-n)$

PART - IV

1x5=5

- VI. Answer any One the following.

42. Draw a triangle LMN given that $LM = 5.5\text{cm}$, $\angle M=70^\circ$ and $\angle L = 50^\circ$
 43. Draw a triangle ABC given that $BC=8\text{cm}$, $AC=6\text{cm}$, $\angle C=40^\circ$.

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