TVL7M

Tirunelveli District

Second Summative Assessment, December - 2024

7 1 0 2 6 -

Standard 7
MATHS

Time: 2.00 Hours Marks: 60

I. Choose the correct answer: 5×1=5

1) Between which two whole number 1.7 lie?
   a) 2 and 3 b) 3 and 4 c) 1 and 2 d) 1 and 7
2) In the formula C = 2πr, 'r' referes to
   a) circumference b) area c) rotation d) radius
3) The degree of $6x^7-7x^3+4$ is
   a) 7 b) 3 c) 6 d) 4
4) 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
5) 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: 5×1=5

6) 100 cm = ... m
7) π = ... (approximate value)
8) The value of $(14 \times 21)^\circ$ is .....
9) The sum of three inner angles in a triangle is .....
10) The sequence 1, 4, 9, 16 ... General form .....

III. Say True or False: 5×1=5

11) $\frac{5}{100} = 0.5$
12) Circle radius "n", then Area of circle is πn^2 sq.units.
13) $2^3 \times 3^2 = 6^5$
14) 140°, 20°, 20° angles are form a triangle
15) The value of $2^{40} + 2^{40}$ is 2^{41}

IV. Match the following: 5×1=5

16) $2^3 \times 4^3$ – 3^{11}
17) $(-2)^4$ – 8^3
18) 2^3+3^2 – 16
19) $(2^3)^2$ – 17
20) $3^4 \times 3^7$ – 2^6

V. Answer any 10 questions 10×2=20

21) Expand the decimal number 237.6
22) Find the decimal number $23 + \frac{6}{10} + \frac{8}{1000}$
23) Arrange the given decimal numbers in descending order
    17.35, 71.53, 51.73, 73.51, 37.51
24) What is the circumference of the circular disc of radius 14cm
25) Find the area of the dining table whose diameter 105cm?

26) A Kho-Kho ground has dimensions 30cm × 19 m which includes a lobby on all of its sides. The dimensions of the playing area 27m × 16 m. Find the area of the lobby

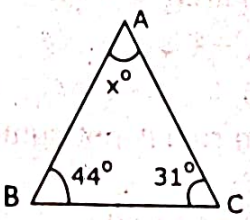
27) Simplify $72^5 \div 9^5$

28) Express 3125 in Exponential form

29) Find the unit digit of the large numbers (i) 9^{12} (ii) 49^{17}

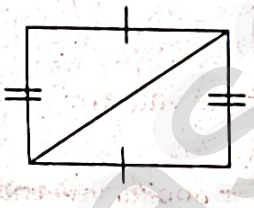
30) Find the degrees of the expression $3t^4-5st^2+7s^3t^2$

31) Find the measure of the missing angle in the give triangle ABC.



32) $6^2 \times 6^m = 6^5$ find the value of "m"

33) State whether the two triangles are congruent or not. Justify your answer



34) Simplify $3^3 \times 3^2 \times 3^4$

VI. Answer any 5 questions **5×3=15**

35) Represent the following decimal number on the number line

i) 1.7 ii) 0.3 iii) 2.1

36) Convert the following into simplest fractions

i) 0.04 ii) 3.46 iii) 0.862

37) A picture is painted on a coiling of a marriage hall whose length and breadth are 18m and 7m respectively. There is a border of 10 cm along each of its sides. Find the area of the border.

38) Simplify $\frac{2^8 \times 3^5 \times 5^4}{3^3 \times 5^3 \times 2^4}$

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

40) In a right angled triangle ABC, $\angle B$ is right angle, $\angle A$ is $x + 1$ and $\angle C$ is $2x + 1$, Find $\angle A$ and $\angle C$

41) Can row sum of elements in a pascal's triangle form a pattern?

VII. Answer any one of the following **1×5=5**

42) Construct a triangle xyz, An equilateral triangle of sides 7.5cm

(OR)

43) Construct a triangle ABC, AB=7cm, AC=6.5cm and $\angle A = 120^\circ$