Tsi7M

Tenkasi District

Second Summative Assessment, December - 2024

16-12-24

Standard 7

MATHS

Part - I

Time: 2.00 Hours Marks: 60

I. Choose the correct answer. 5x1=5

1) A cricket pitch is about 264cm wide. It is equal to .....m
   a) 26.4 b) 2.64 c) 0.264 d) 0.0264
2) Area of a circle of radius 'n' units is
   a) $2\pi r^p$ sq.units b) πm^2 sq.units c) πr^2 sq.units d) πn^2 sq.units
3) $2^{40} + 2^{40}$ is equal to
   a) 4^{40} b) 2^{80} c) 2^{41} d) 4^{80}
4) One of the angles of a triangle is 65°. If the difference of the other two angles is 45° then the two angles are
   a) 85°, 40° b) 70°, 25° c) 80°, 35° d) 80°, 135°
5) The elements along the sixth row of 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. 5x1=5

6) The simplest form of 0.35 is .....
7) The formula to find the width of the circular Path is .....
8) When base is 12 and exponent is 17, its exponential form is .....
9) The exterior angles of a triangle add up to .....
10) The unit digit of $(32\times65)^o$ is .....

III. Say True? or False? 5x1=5

11) $0.04 = \frac{1}{25}$
12) $37.70 < 37.7$
13) $(-7)^2 = -49$
14) Unit digit of 9^{12} is 1
15) Degree of the constant term is 1

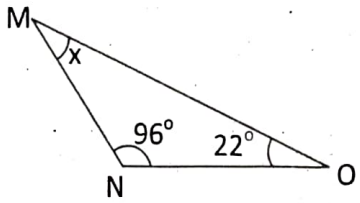
IV. Match the following 5x1=5

16) Circumference of the circle - $\pi(R^2 - r^2)$ sq.units.
17) Area of the circle - a^{m+n}
18) Area of the circular path - $a^{m\times n}$
19) $a^m \times a^n$ - πd units
20) $(a^m)^n$ - πr^2 sq.units

V. Answer any 10 questions. 10x2=20

21) Expand the following decimal number: 5678.358
22) Write the following fraction as decimal: $\frac{23}{10000}$
23) Arrange the following in descending order
    17.35, 71.53, 51.73, 73.51,, 37.51
24) The diameter of a circular well is 4.2m. What is its circumference?
25) Find the area of a hula loop whose diameter is 28cm $\left(\pi = \frac{22}{7}\right)$
26) Find the area of a circular pathway whose outer radius is 32cm and inner radius is 18 cm

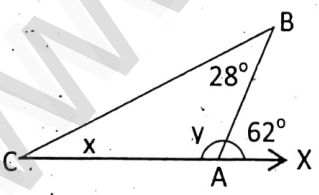
27) Simplify by using the law of exponent. $4^3 \times 2^3 \times 5^3$
28) Find the unit digit of the number 24^{25}
29) Find the degree of the following expression. $3t^4 - 5st^2 + 7S^3t^2$
30) Can you draw a triangle with 25°, 65° and 80° as angles?
31) Find the value of x.



32) If two angles of a triangle are 46° each, how can you classify the triangle?
33) Write the first five numbers in the third slanting row of the Pascal's Triangle
34) Represent the following decimal numbers on the number line (i) 2.1 (ii) 1.7
35) Simplify using law of exponent. $\left(x^m\right)^0$

VI. Answer any 5 questions. **5x3=15**

36) Convert the following into simplest fractions.
i) 0.04 ii) 3.46 iii) 0.862
37) Express the following in metres using decimals
i) 1328 cm ii) 419cm
38) The radius of a tractors wheel is 77cm. Calculate the distance covered by it in 35 rotations? $\left(\text{use } \pi = \frac{22}{7}\right)$
39) Simplify and express the following exponential form. $\frac{4^5 \times a^8 \times b^3}{4^3 \times a^5 \times b^2}$
40) A cow is tethered with a rope of length 35m at the centre of the rectangular field of length 76m and breadth 60m. Find the area of the land that the cow cannot graze?
41) Simplify and find the degree of the following expression.
$10x^2-3xy+9y^2-(3x^2-6xy-3y^2)$
42) In the given figure find the value of x and y



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43) Can row sum of elements in a Pascal's Triangle form a pattern?

VII. Answer any one of the following questions. **1x5=5**

44) a) Construct a equilateral triangle of side 7.5cm

(OR)

b) Draw a triangle ABC given that AB = 6cm, AC = 5cm and $\angle A = 60°$

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