

V7M

Virudhunagar District Common Examinations
Summative Assessment - December 2022

Standard 7

MATHS

Time: 2.00 Hrs.

Marks: 60

I. Choose the correct answer:

5×1=5

- 1) The place value of 3 in 85.073 is _____.
i) tenths ii) hundredths iii) thousands iv) thousandths
- 2) In the formula $C = 2\pi r$, 'r' refers to
i) circumference ii) area iii) rotation iv) radius
- 3) The exponential form of 72 is
i) 7^2 ii) 2^7 iii) $2^2 \times 3^3$ iv) $2^3 \times 3^2$
- 4) If two plane figures are congruent then they have
i) same size ii) same shape
iii) same angle iv) same shape and same size
- 5) The elements along the sixth row of the Pascal's triangle is
i) 1, 5, 10, 5, 1 ii) 1, 5, 5, 1
iii) 1, 5, 5, 10, 5, 1 iv) 1, 5, 10, 10, 5, 1

II. Fill in the blanks:

5×1=5

- 6) $3 + \frac{4}{100} + \frac{9}{1000} = \underline{\hspace{2cm}}$.
- 7) $\frac{\text{Circumference}}{\text{Diameter}} = \underline{\hspace{2cm}}$.
- 8) The value of $(14 \times 21)^0$ is _____.
9) Sum of all three angles of a triangle is _____.
- 10) $a^m \times b^n = \underline{\hspace{2cm}}$.

III. Match it:

5×1=5

- | | | |
|----------------------------------|---|------------------|
| 11) Circumference of a circle | - | $2r$ |
| 12) Area of a circle | - | $\pi(R^2 - r^2)$ |
| 13) Diameter | - | a^{m-n} |
| 14) Area of the circular pathway | - | $2\pi r$ |
| 15) $a^m \div a^n$ | - | πr^2 |

IV. Say True or False:

5×1=5

- 16) The degree of m^2n and mn^2 are equal.
- 17) $7a^2b$ and $-7ab^2$ are like terms.
- 18) The degree of the expression $-4x^2yz$ is -4 .
- 19) Any integer can be the degree of the expression.
- 20) The sum of the exterior angles of a triangles is 360° .

V. Answer any 6 questions only:

6×2=12

- 21) What is the circumference of the circular disc of radius 14 cm?

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- 22) The height of a person is 165 cm. Express this height in metre.
- 23) Represent the decimal number 0.7 on a number line.
- 24) Find the area of the dining table whose diameter is 105m.
- 25) Simplify by using the law of exponents: $7^6 \times 3^6$
- 26) Identify the like terms from the following: $11pq$, $-pq$, $11pqr$, $-11pq$, pq
- 27) Can 30° , 60° and 90° be the angles of a triangle?
- 28) Can row sum of element in a Pascal's Triangle form a pattern?

VI. Answer any 6 questions only:**6×3=18**

- 29) Arrange the given decimal number in Ascending order:
123.45, 123.54, 125.43, 125.34, 125.3
- 30) Megala and Mala bought two watermelons weighing 13.523 kg and 13.52 kg.
Which is a heavier one?
- 31) If the circumference of the circle is 132m. Calculate the radius and diameter.
- 32) Find the area of a circular pathway. Whose outer radius is 32 cm and inner radius is 18 cm.
- 33) Simplify and express each of the following in exponential form:
 - (i) $2^0 \times 3^0 \times 4^0$
 - (ii) $\frac{4^5 \times a^8 \times b^3}{4^3 \times a^5 \times b^2}$
- 34) Add the expressions $4x^2 + 3xy + 9y^2$ and $2x^2 - 9xy + 6y^2$ and find the degree.
- 35) In the three angles of a triangle are in the ratio 3:5:4 then find them.
- 36) Write the first five numbers in the third slanting row of the Pascal's triangle and find their squares? What do you infer?

VII. Answer any 2 questions only:**2×5=10**

- 37) Draw a triangle XYZ given that $XY = 6$ cm, $YZ = 5.5$ cm and $ZX = 5$ cm.

(OR)

Construct an equilateral triangle of side 7.5 cm.

- 38) Draw a triangle ABC given that $AB = 6$ cm, $AC = 5$ cm and $\angle A = 60^\circ$.

(OR)Draw a triangle ABC given $BC = 8$ cm, $AC = 6$ cm and $\angle C = 40^\circ$.
