

Class : 7

Register
Number

SECOND TERM - SUMMATIVE ASSESSMENT(SA) - 2024-25

Time Allowed : 2.00 Hours

MATHEMATICS
PART - I

[Max. Marks : 60]

I. Choose the correct Answer.

5x1=5

- The place value of 3 in 85.073 is -----
a) Tenths b) Hundredths c) Thousands d) Thousandths
- The ratio of the area of a circle to the area of its semicircle is
a) 2:1 b) 1:2 c) 4:1 d) 1:4
- How many Zeros are there in 100^{10} ?
a) 2 b) 3 c) 10 d) 20
- Which of the following methods are used to check the congruence of Plane Figures?
a) Translation Method b) Superposition method
c) Substitution method d) Transposition method
- 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, 1 d) 1, 5, 10, 10, 5, 1

II. Fill in the Blanks.

5x1=5

- Express $\frac{3}{5}$ as decimal number -----
- In the formula $C = 2 \pi r$, 'r' refers to -----
- The value of $(14 \times 21)^0$ is -----
- Unit digit of $124 \times 36 \times 980$ is -----
- If two plane figures are congruent then they have -----

III. Say true or false:

5x1=5

- $2^3 \times 3^2 = 6^5$.
- 0.009 is equal to 0.000900
- $2^3 < 3^2$
- $7a^2b$ and $7ab^2$ are like terms.
- Circumference of a circle is always more than three times of its diameter.

IV. Match the following:

5x1=5

- $\frac{1}{10}$ - 4
- $\frac{C}{d}$ - 30.043 kg
- 30 kg and 43 g - π
- Unit digit of 444^{41} - LB - lb sq units
- Area of the rectangular pathway - 0.1

PART - II

V. Answer any 10 questions. Q.No.35 is Compulsory.

10x2=20

- Expand the following decimal numbers 5678.358
- Write the decimal as fractions. a) 2.5 b) 0.75
- Represent the decimal numbers on the number line (i) 1.7 (ii) 2.1
- Write the following amount using decimals. (i) 809 rupees 99 paise (ii) 147 rupees 70 paise
- Arrange the following in ascending order. 123.45, 123.54, 125.43, 125.34, 125.3
- The diameter of a circular well is 4.2m. What is its circumference?
- Find the area of a hula loop whose diameter is 28 cm (use $\pi = \frac{22}{7}$)
- Find the area of circular pathway whose outer radius is 32cm and inner radius is 18cm.
- Express 729 in exponential form.
- Write the following in exponential form. (i) $6 \times 6 \times 6 \times 6$ (ii) $5 \times 5 \times 7 \times 7 \times 7$

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31. Find the unit digit of the numeric expressions. $10000^{10000} + 11111^{11111}$
 32. Find the value of x.



33. If the three angles of a triangle are in the ratio 3:5:4, then find them.
 34. Identify the like term: $12x^3y^2z$, $-y^3x^2z$, $4z^3y^2x$, $6x^3z^2y$, $-5y^3x^2z$.
 35. Write the relationship between x and y from the given table.

x	1	2	3	4
y	4	8	12	16

Identify the greater number 5^3 or 3^5 .

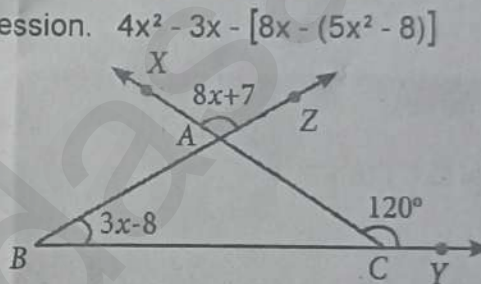
(OR)

PART - III

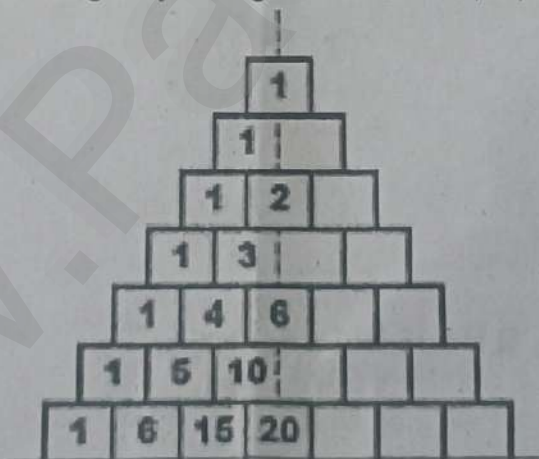
5x3=15

VI. Answer any 5 of the following:

36. Express the following decimal numbers in place value grid and write the place value of the underlined digit. (i) 263.271 (ii) 428.001 (iii) 9.657
 37. Express the following in meter using decimals. (i) 7cm (ii) 43cm (iii) 6m 6cm.
 38. The area of the circular region is 2464cm^2 . Find its radius and diameter (use $\pi = \frac{22}{7}$)
 39. A Rose garden is in the form of circle of radius 63 m. The gardener wants to fence it at the rate of ₹ 150 per metre. Find the cost of fencing?
 40. Simplify using laws of exponents.
 (i) $(5^2 \times 5^3) \div 5^5$ (ii) $\frac{4^5 \times a^8 \times b^3}{4^3 \times a^5 \times b^2}$
 41. Simplify and find the degree of the expression. $4x^2 - 3x - [8x - (5x^2 - 8)]$
 42. Find the value of x. in the given triangle.



43. Complete the pascal's Triangle by taking the number 1, 2, 6, 20 as line of symmetry.



(OR)

If $a = 3$ and $b = 2$ then find the value of following (i) $a^b + b^a$ (ii) $a^a - b^b$

PART - IV

VII. Answer any one of the following.

1x5=5

44. a) Draw a triangle XYZ given that $XY = 6\text{ cm}$, $YZ = 5.5\text{ cm}$ and $ZX = 5\text{ cm}$.
 (OR)
 b) Draw a triangle PQR given that $\angle P = 60^\circ$, $\angle R = 35^\circ$ and $PR = 7.8\text{ cm}$.