

R

COMMON SECOND MID - TERM TEST - 2022

Standard - VII
MATHEMATICS

Reg.No.

7212

Marks: 60

Time: 2.00 hrs.

I. Choose the best answer:

5 × 1 = 5

- The place value of 3 in 85.073 is _____.
i) tenths ii) hundredths iii) thousands iv) thousandths
- $\frac{3}{5} =$ _____.
i) 0.06 ii) 0.006 iii) 6 iv) 0.6
- The formula used to find the area of the circle is _____ sq.units.
i) $4\pi r^2$ ii) πr^2 iii) $2\pi r^2$ iv) $\pi r^2 + 2r$
- Formula used to find the circumference of a circle
i) $2\pi r$ units ii) $\pi r^2 + 2r$ units iii) πr^2 sq.units iv) πr^3 cu.units
- $a \times a \times a \times a \times a$ is equal to
i) a^5 ii) 5^a iii) $5a$ iv) $a + 5$

II. Say True or False :

5 × 1 = 5

- $0.3 = \frac{3}{10}$ T
- Circumference of a circle is always three times of its diameter. F
- $7a^2b$ and $-7ab^2$ are like terms. F
- $2^3 \times 3^2 = 6^5$ F
- $2^3 < 3^2$ F

III. Match the following:

5 × 1 = 5

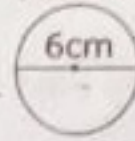
- Circumference of circle - πr^2 units 3
- 4.003 - a^{m-n} 5
- Area of circle - $2\pi r$ units 7
- $a^m \times a^n$ - $4 + \frac{3}{100}$ 2
- $\frac{a^m}{a^n}$ - a^{m+n} 4

IV. Answer any ten of the following :

10 × 2 = 20

- Expand the following number : 37.3
- Convert the 3.46 into simplest fraction.
- Compare the following decimal numbers and find out the smaller number 2.08, 2.086

19. Find the greater decimal number in the following: 5.6, 6.5
20. Calculate the circumference of the bangle shown in figure (Take $\pi = 3.14$)
21. Find the area of circle of radius 21cm.
22. The formula to find the area of the circular path is _____.
23. Express $6 \times 6 \times 6 \times 6$ in exponential form.
24. Simplify by using laws of exponents : $18^8 \div 18^4$
25. Simplify by using laws of exponents: $7^6 \times 3^6$
26. Identify the like terms: $12x^3y^2z$, $-y^3x^2z$, $4z^3y^2x$, $6x^3z^2y$, $-5y^3x^2z$
27. Find the degree of the following expression : x^5
28. Add and find the degree of the following expressions: $(9x + 3y)$ and $(10x - 9y)$
29. The height of a person is 165cm. Express this height in metre.
30. Express the following decimal numbers in place value grid and write the place value of the underlined digit. 53.61



V. Answer any five of the following:

5×5=25

31. Expand the following decimal numbers : i) 658.37 ii) 5678.358
32. Express the following fractions as decimal numbers.
 - i) $\frac{3}{5}$
 - ii) $\frac{5}{100}$
33. Arrange the following in ascending order and descending order :
2.35, 2.53, 5.32, 3.52, 3.25
34. If the circumference of the circle is 132m. Then calculate the radius and diameter
(Take $\pi = \frac{22}{7}$)
35. The floor of the circular swimming Pool whose radius is 7m has to be cemented at the rate of Rs. 10 per m^2 . Find the total cost of cementing the floor.
36. Find the area of a circular pathway whose outer radius is 32cm and inner radius is 18cm.
37. Simplify using produces Rule of exponents : i) $5^7 \times 5^3$ ii) $3^3 \times 3^2 \times 3^4$
38. Express 144 using exponential form.