

FIRST MID TERM TEST - 2022

8 - Std

MATHS

Reg.
No.

--	--	--	--	--	--

Marks : 50

Time : 1.30 Hrs

I Choose the correct answer.

5 X 1 = 5

1. Which of the following pairs is equivalent?

- a) $\frac{-20}{12}$ b) $\frac{16}{-30}, \frac{8}{15}$ c) $\frac{-18}{36}, \frac{-20}{44}$ d) $\frac{7}{-5}, \frac{-5}{7}$

2. $\frac{3}{4} \times \left(\frac{5}{8} + \frac{1}{2} \right) = \dots\dots\dots$

- a) $\frac{5}{8}$ b) $\frac{2}{3}$ c) $\frac{15}{32}$ d) $\frac{15}{16}$

3. $\frac{35}{4} \times \left(\frac{1}{2} - \frac{1}{4} \right) = \frac{3}{4} \times \frac{1}{2} - \frac{3}{4} \times \frac{1}{4}$ illustrate that multiplication is distributive over

- a) addition b) subtraction c) multiplication d) division

4. The square of 43 ends with the digit

- a) 9 b) 6 c) 4 d) 3

5. 0.000000002020 in decientfic form is

- a) 2.02×10^9 b) 2.02×10^{-9} c) 2.02×10^{-8} d) 2.02×10^{-10}

II Fill in the blanks.

1 X 5 = 5

6. The rational numbers $\frac{-8}{3}$ and $\frac{8}{3}$ are equidistant from

7. The rational number does not have a reciprocal.

8. For $a \neq 0$, a^0 is

9. A line segment which joins any two paints on a circle is a

10. A cube has faces.

III Match the following.

5 X 1 = 5

- | | | |
|------------------------|---|-------------------------------------|
| 11. Area of a circle | - | $\frac{\theta}{360} \times \pi r^2$ |
| 12. Circumference | - | a^{m+n} |
| 13. Area of the sector | - | $2\pi r$ |
| 14. $a^m \times a^n$ | - | 10 |
| 15. $\sqrt[3]{1000}$ | - | πr^2 |

PART- B**IV Answer any five questions.**

2 X 5 = 10

16. Find a rational number $\frac{1}{3}$ between and $\frac{5}{9}$.
17. $\frac{-12}{17}$ from $\frac{9}{17}$.
18. Evaluate: $\frac{-5}{8} \times \frac{7}{3}$.
19. Simplify: $\sqrt{2} \times \sqrt{3}$.
20. Is 108 a perfect square number.
21. A spinner of radius 7.5cm is divided into 6 equal sectors. Find the area of each of each of sector.
22. A circular shaped gymnasium ring of radius 35cm is divided into 5 equal arcs shaded with different colours. Find the length of each of the arcs.

PART- C**V Answer any four questions.**

5 X 4 = 20

23. Find $(a + b) \div (a - b)$ if $a = \frac{1}{2}$, $b = \frac{2}{3}$.
24. The product of two rational numbers is $\frac{-2}{3}$. If one number is $\frac{3}{7}$ then find the other.
25. Find the square root of 576.
26. Find the cube root of $24 \times 36 \times 80 \times 25$.
27. Find 'x' so that $(-7)^{x+2} \times (-7)^5 = (-7)^{10}$.
28. The radius of a sector is 21cm and its centre angle is 120° . Find the area and length of an arc.

PART - D**VI Answer the following.**

1 X 5 = 5

29. Construct a quadrilateral DEAR with DE = 6cm, EA = 5cm, AR = 5.5cm, RD = 5.2 cm and DA = 10 cm. Also find its area. **(OR)**
Construct a quadrilateral MATH with MA = 4cm, AT = 3.6cm, TH = 4.5cm, MH = 5 cm, $\angle A = 85^\circ$. Find its area.