

8 - Std

FIRST MID TERM TEST - 2022

MATHS

Reg.
No.

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Time : 1.30 Hrs

Marks : 50

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

a) $\frac{5}{8}$

b) $\frac{2}{3}$

c) $\frac{15}{32}$

d) $\frac{15}{16}$

3. $\frac{35}{4} X \left(\frac{1}{2} - \frac{1}{4} \right) = \frac{3}{4} X \frac{1}{2} - \frac{3}{4} X \frac{1}{4}$ 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. 0.0000000002020 in decimal 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 points on a circle is a
10. A cube has faces.

III Match the following.

5 X 1 = 5

11. Area of a circle

$$\frac{\theta}{360} X \pi r^2$$

12. Circumference

$$a^{m+n}$$

13. Area of the sector

$$2\pi r$$

- 14.
- $a^m \times a^n$

$$10$$

- 15.
- $\sqrt[3]{1000}$

$$\pi r^2$$

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

2 X 5 = 10

16. Find a ration 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 circualr shaped gymnasium ring of radius 35cm is divided into 5 equal arc O 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 are.

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

1 X 5 = 5

29. Construct a quadrilateral DEAR with $DE = 6\text{cm}$, $CA = 5\text{cm}$, $AR = 5.5\text{cm}$, $RD = 5.2\text{ cm}$ and $DA = 10\text{ cm}$. Also find its area. (**OR**)

Construct a quadrilateral MATH with $MA = 4\text{cm}$, $AT = 3.6\text{cm}$, $TH = 4.5\text{cm}$, $MH = 5\text{ cm}$, $\angle A = 85^\circ$. Find its area.