

Standard 8
MATHSMarks: 50
5×1=5

Time: 1.30 Hours

I. Choose the best answer:

- 1) $\frac{-5}{4}$ is a rational number which lies between
- a) 0 and $\frac{-5}{4}$ b) -1 and 0 c) -1 and -2 d) -4 and -5
- 2) The standard form of the sum $\frac{3}{4} + \frac{5}{6} + \left(\frac{-7}{12}\right)$ is
- a) 1 b) $-\frac{1}{2}$ c) $\frac{1}{12}$ d) $\frac{1}{22}$
- 3) The square of 43 ends with the digit
- a) 9 b) 6 c) 4 d) 3
- 4) The value of π is
- a) $\frac{7}{22}$ b) $\frac{22}{7}$ c) $\frac{21}{7}$ d) $\frac{7}{21}$
- 5) Circumference of circle
- a) $2\pi r$ b) πr^2 c) πr d) $\frac{\pi r^2}{2}$

II. Fill in the blanks:

4×1=4

- 6) The multiplicative inverse of -1 is
- 7) $4^{-3} \times 5^{-3} = \dots\dots\dots$
- 8) The longest chord of a circle is
- 9) A part of circumference of a circle is called as

III. True (or) False:

4×1=4

- 10) 0 is the smallest rational number
- 11) The additive inverse of $\frac{-11}{-17}$ is $\frac{11}{17}$
- 12) The square root of 225 is 15
- 13) Area of the sector = $\frac{\theta^0}{360^0} \times \pi r^2$ sq. units

IV. Answer any three:

3×2=6

- 14) Find the sum : $\frac{7}{5} + \frac{5}{7}$
- 15) Is 108 a perfect square number?
- 16) Find the cube root of 6859 by prime factorisation
- 17) Write in scientific notation

- 18) A spinner of radius 7.5cm is divided into 6 equal sectors. Find the area of each of the sectors.
- 19) Central angle 45° , $r = 16\text{cm}$. Find the length of the arc, perimeter

V. Answer any three:**3×5=15**

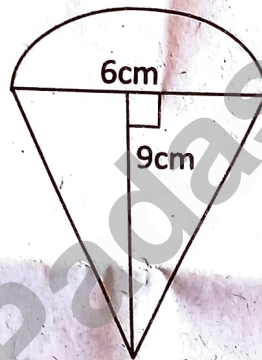
20) Simplify:

$$\left(\frac{4}{3} - \left(\frac{-3}{2}\right)\right) + \left(\frac{-5}{3} + \frac{30}{12}\right) + \left(\frac{-12}{9} \times \frac{-27}{16}\right)$$

21) Find the square root by long division method

- i) 11025 ii) 6889

22) Find the smallest number by which 200 should be multiplied to make it a perfect cube.

23) Kamalesh has a dining table circular in shape of radius 70 cm where as Tharun has a circular Quadrant dining table of radius 140cm. Whose dining table has a greater area? $\left(\pi = \frac{22}{7}\right)$ 24) Find the area of the combined figure given, formed by joining a semicircle of diameter 6cm with a triangle of base 6cm and height 9cm ($\pi = 3.14$)**VI. Answer any two:****2×8=16**25) Construct a quadrilateral DEAR with $DE = 6\text{cm}$, $EA = 5\text{cm}$, $AR = 5.5\text{cm}$, $RD = 5.2\text{cm}$ and $DA = 10\text{cm}$. Also Find its area.**(OR)**PQRS, $PQ = QR = 3.5\text{cm}$, $RS = 5.2\text{cm}$, $SP = 5.3\text{cm}$ and $\angle Q = 120^\circ$ construct a quadrilateral and also find its area.26) Construct a trapezium BOAT in which \overline{BO} is parallel to \overline{TA} $BO = 7\text{cm}$, $OA = 6\text{cm}$, $BA = 10\text{cm}$ and $TA = 6\text{cm}$. Also find its area.**(OR)**Construct a trapezium CITY with $\overline{CI} \parallel \overline{YT}$, $CI = 7\text{cm}$, $IT = 5.5\text{cm}$ $TY = 4\text{cm}$ and $YC = 6\text{cm}$.
