

FIRST TERM SUMMATIVE EXAMINATION - 2022

8 - STD

MATHEMATICS

Roll No.							
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Time : 2.00 Hrs

Marks : 60

I Choose the best answer.

5 X 1 = 5

- The square of 43 ends with digit
a) 9 b) 6 c) 4 d) 3
- The cube has faces
a) 4 b) 5 c) 3 d) 6
- $7P^3 \times (2P^2)^2 = \dots\dots\dots$
a) $14P^7$ b) $28P^7$ c) $9P^7$ d) $11P^7$
- What is the marked price of a hat which is bought for Rs. 210 at 15% discount?
a) Rs. 243 b) Rs. 176 c) Rs. 239 d) Rs. 250
- The hypotenuse of a right angled triangle of sides 12cm and 16cm is
a) 28cm b) 20 cm c) 24cm d) 21 cm

II Fill in the blanks.

1 X 5 = 5

- The standard form of $\frac{48}{-24}$ is
- The longest chord of a circle is
- $(a + b)^2 = (a + b) \times \dots\dots\dots$
- The sum of the three angles of a triangle is
- The eleventh Fibonacci number is

III Say true or false.

5 X 1 = 5

- The scientific form of 123456 is 1.23456×10^{-2} .
- The angle of the semicircle is 180° .
- $(a - b)^2 = (a + b)(a - b)$.
- Loss = cost of price - selling price.
- The 2 digit numbers contain the number 7 is 18.

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IV Answer any five of the following questions.

5 X 2 = 10

16. Find the cube root of 27000.
17. Find the area of the sectors its length of the arc 48m and radius is 10m.
18. Expand : $(3m + 5)^2$.
19. Factorise : $y^2 - 10y + 25$.
20. Find the difference in C.I. and S.I. for P = Rs. 5000, r = 4% p.a. n = 2 years.
21. Using repeated subtraction method, find the HCF of 36 and 80.
22. Can a right triangle have sides that measure 5cm, 12cm and 13cm.

V Answer any four of the following questions.

4 X 5 = 20

23. Simplify : $\left[\frac{11}{8} \times \left(\frac{-6}{33} \right) \right] + \left[\frac{1}{3} + \left(\frac{3}{5} \div \frac{9}{20} \right) \right] - \left[\frac{4}{7} \times \frac{-7}{5} \right]$.
24. Find the square root by long division method : 17956.
25. Find the area of the shaded region in the square of side 10cm as given in the figure.
26. Factorise : $x^3 + 15x^2 + 75x + 125$.
27. The mat of length 180m is made by 15 women in 12 days. How long will it take for 32 women to make a mat of length 512m?
28. Using repeated subtraction method. Find the HCF of the 320, 120 and 95.

VI Answer the following questions.

1 X 8 = 8

29. Construct a quadrilateral ABCD with AB = 5cm, BC = 4.5cm, CD = 3.8cm, DA 4.4cm and AC = 6.2cm. Also find its area. (OR)
Construct a trapezium-DESK in which \overline{DE} is parallel to \overline{KS} , DE = 8cm, ES = 5.5cm, KS = 5m and KD = 6cm, Also find its area.
30. Draw a straight line by joining the points A (-2, 6) and B (4, -3). (OR) Draw the graph of the equation $y = x - 4$.

1 x 7 = 7