

QSS QUARTERLY EXAMINATION - 2025

8 - Std

MATHS

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Time : 2.30 Hrs

Marks : 100

PART-A**I Choose and write the correct answer.****10 × 1 = 10**

- The sum of the digits of the denominator in the simplest form of $\frac{112}{528}$ is———
a) 4 b) 5 c) 6 d) 7
- The number of digits in the square root of 123454321———
a) 4 b) 5 c) 6 d) 7
- Closure property is not true for division of rational numbers because of the number.
a) 1 b) -1 c) 0 d) $\frac{1}{2}$
- The square of 43 ends with the digit ——
a) 9 b) 6 c) 4 d) 3
- The product of $7p^3$ and $(2p^2)^2$ is
a) $14p^{12}$ b) $28p^7$ c) $9p^7$ d) $11p^{12}$
- 15% of 25% of 10000= ——
a) 375 b) 400 c) 425 d) 475
- A fruit vendor sells fruits for Rs. 200 gaining Rs. 40. His gain percentage is———.
a) 20% b) 22% c) 25% d) $16\frac{2}{3}\%$
- A flag pole 15m high casts a shadow of 3 m at 10 a.m. The shadow cast by a building at the same time is 18.6 m. The height of the building is———.
a) 90 m. b) 91 m c) 92 m d) 93 m
- The hypotenuse of a right angled triangle of sides 12cm and 16 cm is ——
a) 28 cm b) 20 cm c) 24 cm d) 21 cm
- In how many ways can you answer 3 multiple choice questions, with the choices A,B,C and D?
a) 4. b) 3 c) 12 d) 64

II Fill in the blanks.**5 × 1 = 5**

- The maximum number of digits in the cube of a two digit number is ——.
- The longest chord of a circle is ——.
- The x-coordinate is always —— on the y-axis
- Loss or gain percentage is always calculated on the ——.
- If the sides of a triangle are in the ratio 5:12:13 then, it is ——.

III Say True ? False ?**5 × 1 = 5**

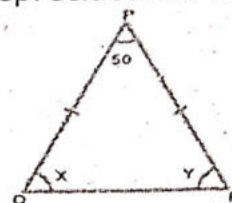
- 0 is the smallest rational number.
- The radius of a circle of diameter 24 cm is 48 cm.
- $(-9,0)$ lies on the x axis.
- The time taken for Rs.1000 to become Rs.1331 at 20% p.a, compounded annually is 3 years.
- In a right angled triangle, the hypotenuse is the greatest side.

IV Match.**5 × 1 = 5**

- | | | |
|------------------------|---|-------------|
| 21. Area of the circle | - | AB^2+AC^2 |
| 22. a^0 | - | πr^2 |
| 23. Cube | - | 2 |
| 24. $F + V - E$ | - | 6 faces |
| 25. BC^2 | - | 1 |

PART - B**V Answer the following. (Any 12)****12 × 2 = 24**

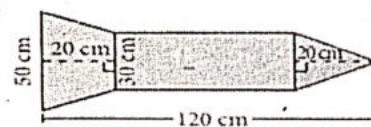
26. Compare. $\frac{2}{3}$ and $\frac{4}{5}$.
27. Find the smallest number by which 200 should be multiplied to make it a perfect cube.
28. Is 108 a perfect square number?
29. Find the number in standard form for the expansion:
 $8 \times 10^4 + 7 \times 10^3 + 6 \times 10^2 + 5 \times 10^1 + 2 \times 1 + 4 \times 10^{-2} + 7 \times 10^{-4}$.
30. Find the value of $(-2)^5 \times (-2)^{-3}$.
31. A circular shaped gymnasium ring of radius is 35 cm is divided into 5 equal arcs shaded with different colors. Find the length of each of the arcs.
32. Find the product of terms. $3x^2y$, $-3xy^3$, x^2y^2 .
33. Simplify: $3m^2/m + 2m^4/m^3$.
34. Divide $(32y^2 - 8yz)$ by $2y$.
35. Find the quadrants without plotting the points. $(2, 0)$, $(-7, 2)$, $(0, 10)$, $(5, 7)$.
36. 48 is 32% of which number?
37. The value of a motor cycle 2 yrs ago was Rs. 70000. It depreciates at the rate of 4% p.a. Find its present value.



38. Find the unknowns in the following figure.
39. A 20 feet ladder leans against a wall at height of 16 feet from the ground. How far is the base of the ladder from the wall?
40. An examination paper has 3 sections, each with five questions and students are instructed to answer one question from each section. In how many different ways of can the questions be answered?

PART - C**VI Answer the following (Any 7).****7 × 5 = 35**

41. Find atleast five rational numbers between $-\frac{1}{2}$ and $\frac{3}{5}$.
42. Find $(a + b) \div (a - b)$ if $a = \frac{1}{2}$, $b = \frac{2}{3}$.
43. The product of two rational numbers is $-\frac{2}{3}$. If one number is $\frac{3}{7}$, then find the other.
44. Find the square root of 11025 by long division method.
45. Find x so that $(-7)^{x+2} \times (-7)^5 = (-7)^{10}$.
46. A rocket drawing has the measures as given in the figure. Find its area.
47. Multiply $(2x + 5y)$ and $(3x - 4y)$.
48. When a number is decreased by 25%, it becomes 120. Find the number.
49. If the selling price of 10 rulers is the same as the cost price of 15 rulers, then find the profit percentage.
50. The height of a man and his shadow form a triangle similar to that formed by a nearby tree and its shadow. What is the height of the tree?

**PART-D****VII Answer all the questions.****2 × 8 = 16**

51. Construct a quadrilateral DEAR with $DE = 6\text{cm}$, $EA = 5\text{cm}$, $AR = 5.5\text{cm}$, and $RD = 5.2\text{cm}$ and $DA = 10\text{cm}$. Also find its area. **(OR)** Construct a trapezium AIMS in which $AI \parallel SM$, $AI = 6\text{cm}$, $IM = 5\text{cm}$, $AM = 9\text{cm}$ and $MS = 6.5\text{cm}$. Also find its area.
52. Draw a straight line by joining the points A $(-2, 6)$ and B $(4, -3)$. **(OR)** Draw the graph of $y = 6$.