# VR TUITION

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**MODEL QUARTERLY TERM EXAMINATION**

**STD : VIII** **MATHEMATICS**

**TIME : 2.30Hrs** **MARKS :100**

**I.CHOOSE THE CORRECT ANSWER** $5 \times 1 = 5$

1.Closure property is not true for division of rational numbers because of the number

(A) 1 (B) −1 (C) 0 (D) 1

2. If $\frac{10^x}{10^{-3}} = 10^9$, then $x$ is _____.

(A) 4 (B) 5 (C) 6 (D) 7

3.If the area of a square is $36x^4y^2$ then, its side is _____.

(A) $6x^4y^2$ (B) $8x^2y^2$ (C) $6x^2y$ (D) $-6x^2y$

4.A fruit vendor sells fruits for Rs.200 gaining Rs. 40. His gain percentage is

(A) 20% (B) 22% (C) 25% (D) $16\frac{2}{3}$ %

5.Two similar triangles will always have _____angles

(A) acute (B) obtuse (C) right (D) matching

**II.FILL IN THE BLANK** $5 \times 1 = 5$

6.The symbol ~ is used to represent _____ triangles.

7.Loss or gain percentage is always calculated on the_____.

8. $\frac{18m^4(\_\_)}{2m^3n^3} =$ _____$mn^5$

9.The meeting point of more than two edges in a polyhedron is called as _____.

10.The rational number _____ does not have a reciprocal.

**III.WRITE TRUE OR FALSE** $5 \times 1 = 5$

11.The standard form of $2 \times 10^{-4}$ is 0.0002

12.A square number will not have odd number of zeros at the end.

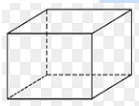
13.$7ab^3 \div 14ab = 2b^2$

14.The time taken for Rs.1000 to become Rs.1331 at 20% p.a, compounded annually is 3 years.

15.In a right angled triangle, the hypotenuse is the greatest side.

**IV.MATCH THE FOLLOWING** $5 \times 1 = 5$

16.  - $-12y^3$

17.  - $20x^2y - 20x$

18. Circumference of a semicircle - triangular prism

19. $4y^2 \times -3y$ - $2\pi r$

20. $5x(4xy - 4)$ - cuboid

**V.ANSWER ANY 10 OF THE FOLLOWING QUESTIONS** $10 \times 2 = 20$

21.Subtract : $\frac{-8}{44}$ from $\frac{-17}{11}$

22.Evaluate : $\left(\frac{-5}{6}\right)^{-3}$

23. If the length of the arc is $48m$ and the radius is $10m$ then find the area of the sector.

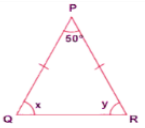
24.If the number of faces =10 , vertices =6and edges=12verify the Euler's formula.

25.Multiply$(2x + 5y)$ and $(3x - 4y)$

26.A number when increased by 18% gives 236. Find the number.

27.Check whether given sides are the sides of right-angled triangles, using Pythagoras theorem: 9,40,41

28.Find the unknowns in the given figure.




29.If you have 2 school bags and 3 water bottles then, in how many different ways can you choose each one of them, while going to school ?

30. Find the quadrants without plotting the points on a graph sheet. (3, − 4), (5,7), (2,0), ( − 3, − 5)

31.Find the difference in C.I and S.I for $P = \text{Rs.}5000, r = 4\%\, p.a, n = 2\ years.$

32. Divide $27y^3$ by $3y$

33. compare $\frac{3}{-4}, \frac{-1}{2}$

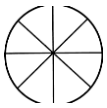
34. If selling an article for Rs. 820 causes 10% loss on the selling price, then find its cost price.

**VI.ANSWER ANY 8 OF THE FOLLOWING QUESTIONS** **8 × 5 = 40**

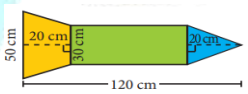
35. simplify: $\left[\frac{11}{8} \times \left(\frac{-6}{33}\right)\right] + \left[\frac{1}{3} + \left(\frac{3}{5} \div \frac{9}{20}\right)\right] - \left[\frac{4}{7} \times \frac{-7}{5}\right]$

36. Find the square root by long division method: 418609

37. A circle is formed with 8 equal granite stones as shown in the figure each of radius 56 $cm$ and whose central angle is 45°. Find the area of each of the granite stones. $\left(\pi = \frac{22}{7}\right)$



38. A rocket drawing has the measures as given in the figure. Find its area.

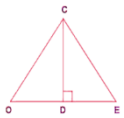



39. A branded Air-Conditioner (AC) has a marked price of Rs.38000. There are 2 options given for the customer.

(i) Selling Price is the same Rs.38000 but with attractive gifts worth Rs.3000 (or)

(ii) Discount of 8% on the marked price but no free gifts. Which offer is better?

40. In the given figure, D is the midpoint of OE and $\angle CDE = 90°$.Prove that $\Delta ODC \equiv \Delta EDC$




41.Roll numbers are created with a letter followed by 3 digits in it, from the letters A, B, C, D and E and any 3 digits from 0 to 9. In how many possible ways can the roll numbers be generated? (except A000, B000, C000, D000 and E000)

42.If $l = 4pq^2, b = -3p^3q, h = 2p^3q^3$ then, find the value of $l \times b \times h$ .

43.Find the C.I on Rs.15000 for 3 years if the rates of interest are 15 % , 20 % and 25 % for the I, II and III years respectively.

44. verify the distributive property $a \times (b + c) = (a \times b) + (a \times c)$ for the rational numbers $a = \frac{-1}{2}, b = \frac{2}{3}$and $c = \frac{-5}{6}$

45.Divide $81(p^4q^2r^3 + 2p^3q^3r^2 - 5p^2q^2r^2)$ by $(3pqr)^2$

46.Dhamu fixes a square tiles of 30$cm$ on the floor . The tiles has a sector design on its as shown in the figure. Find the area of the sector.($\pi = 3.14$)

**VII.ANSWER THE FOLLOWING QUESTIONS** **2 × 8 = 16**

47. a)construct a quadrilateral DEAR with DE=6cm ,EA =5cm,AR=5.5cm, RD=5.2 cm and DA=10cm. Also find its area.

(OR)

b)Construct a trapezium CUTE with $\overline{CU} \parallel \overline{ET}$ , CU=7cm ,$\angle UCE = 80°$, CE = 6cm and TE = 5cm

48.a)Plot the following points in a graph sheet.

A(5,2),B(-7,-3),C(-2,4),D(0,-5),E(7,-4),F(5,7), G(0,10),H(-1,1)

(OR)

b) Plot the following points in a graph sheet.

M(5,7), A( 0,7), T(-1,-1), H(3,-4), E(-4,6), M(4,-3), A(-2,6), T(5,2 ).