8 C

Register No.

Revision Test - 2025

MATHEMATICS

Time : 2.30 Hours Marks : 100

I. Choose the best answer 5x1=5

1. The number which is subtracted from $\frac{-6}{11}$ to get $\frac{8}{9}$ is
   a) $\frac{34}{99}$ b) $\frac{-142}{99}$ c) $\frac{142}{99}$ d) $\frac{-34}{99}$
2. The product of $7p^3$ and $(2p^3)^2$ is
   a) $14p^{12}$ b) $28p^7$ c) $9p^7$ d) $11p^{12}$
3. 15% of 25% of 10000 = ...
   a) 375 b) 400 c) 425 d) 475
4. Two similar triangles will always have ..... angles
   a) acute b) obtuse c) right d) matching
5. Data is a collection of .....
   a) numbers b) words c) measurements d) all the three

II. Fill in the blanks 4x1=4

6. The ones digit in the square of 77 is .....
7. In an equation a + b = 23. The value of a is 14 then the value of b is .....
8. A fruit vendor sells fruits for ₹200 gaining ₹40. His gain percentage is .....
9. Inclusive series is a ..... series.

III. Match the following: 5x1=5

10. Area of the sector of a circle	-	X=4
11. Perimeter of a semicircle	-	52.52%
12. 0.5252	-	circular graph
13. 20=6x-4	-	$\frac{\theta}{360^\circ} \times \pi r^2$ sq. units
14. Pie-chart	-	$(\pi+2)r$ units
	-	$l+2r$ units

IV. Say true or false; 5x1=5

15. 0 is the smallest rational number,
16. The linear equation in one variable has one solution,
17. In any triangle the centroid and the incentre are located inside the diagram,
18. Distance and time follow Direct Proportion.
19. The eleventh number of Fibonacci number is 77.

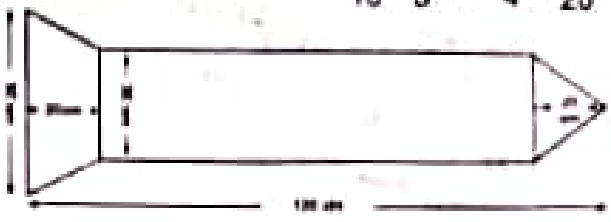
V. Answer the following: (any Ten) 10x2=20

20. Find the sum of $\frac{7}{5} + \frac{5}{7}$
21. Evaluate $\left(\frac{-5}{6}\right)^3$
22. Is 108 a perfect square number,
23. The radius of a Sector is 16cm and its central angle is 45° then find the length of the arc.
24. Expand (x+3)(x+5)(x+2)
25. Factorise: $49x^2 - 64y^2$
26. If $l=4pq^2$, $b = -3p^2q$ $h = 2p^3q^3$ then, find the value of l x b x h.
27. x% of 600 is 450, then find the value of x
28. Akila scored 80% of marks in an examination. If the score was 576 marks, then find the maximum marks of the examination.

29. If selling an article for ₹ 820 causes a 10% loss on the Selling Price, then find its cost price.
30. Can a right-angled triangle have sides that measure 5cm, 12cm, and 13cm?
31. If 48 men working 7 hours a day can do a work in 24 days, then in how many days will 28 men working 8 hours a day complete the same work?
32. Represent the following data in an ungrouped frequency table, which gives the number of children in 25 families 1, 3, 0, 5, 2, 3, 2, 4, 1, 0, 5, 4, 3, 1, 3, 2, 5, 2, 1, 1, 2, 6, 2, 1, 4.
33. Using the repeated division method, find the HCF of 56 and 12.

VI. Answer any 9 questions: **9×5=45**

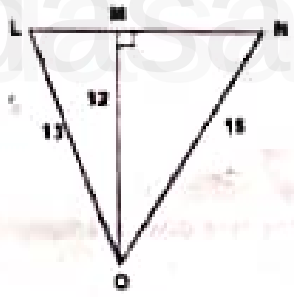
34. Arrange the following rational numbers in ascending and descending order $\frac{-17}{10}, \frac{-7}{5}, 0, \frac{-2}{4}, \frac{-19}{20}$
35. simplify (i) $\frac{9^2 \times 7^3 \times 2^5}{84^3}$ (ii) $(3^2)^3 \times (2x3^5)^4 \times (18)^2$
36. A rocket drawing has the measures as given in the figure. Find its area



37. Expand : (i) $(x+4)^3$ (ii) Find the value of $(103)^3$
38. Factorise: $3x^3-45x^2y + 225xy^2 - 375y^3$
39. The denominator of a fraction is 3 more than its numerator. If 2 is added to the numerator and 9 is added to the denominator, the fraction becomes $\frac{5}{6}$. Find the original fraction.
40. A Principal becomes ₹ 2028 in 2 years at 4% p.a. Compound interest. Find the principal.
41. The ratio of boys and girls in a class is 5:3 if 16% of boys and 8% of girls failed in an examination then find the percentage of Passed Students.
42. A survey gives the following information of food items Preferred by people. Draw a pie chart.

Items	Vegetables	Meat	Salad	Fruits	Sprouts	Bread
No. of People	160	90	80	50	30	40

43. Find LM, MN, LN and also the area of ΔLON. LO =13cm, MO = 12cm, NO = 15cm.



44. A can do a work in 45 days. He works at it for 15 days and then, B alone finishes the remaining work in 24 days. Find the time taken to complete 80% of the work if they work together.
45. Using repeated subtraction method, find the HCF of 320, 120 and 95.

VII. Answer any 2 questions. **2x8=16**

46. Construct a quadrilateral DEAR with DE = 6cm, EA = 5cm, AR = 5.5cm, RD = 5.2cm and DA = 10cm.

(OR)

Construct a parallelogram ARTS with AR = 6cm, RT = 5cm and ∠ART = 70°

47. Plot the following points on graph sheet:
A (5,2), B (-7,-3), C (-2,4), D (-1,-1), E (0,-5), F (2,0), G (7,-4) H (-4,0)

(OR)

Graph the equation y = 2x+5.