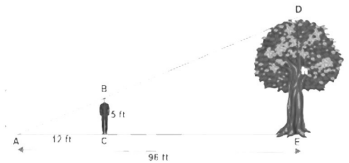
40) The height of a man and his shadow form a triangle similar to that formed by a nearby tree and its shadow. What is the height of the tree?



41) Draw a pie diagram to represent the following data, which shows the expenditure of paddy cultivation in 2 acres of land.

Particulars	Seeds	Ploughing	Wages	Fertilizer	Harvest	Others
Expenses	2000	6000	10000	7000	8000	3000

42) Using repeated subtraction method, find the HCF of 280 and 420.

PART- D

IV. Answer the following questios. **2 × 8 = 16**

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

(or)

Construct a rectangle HAND with HA = 7 cm and AN = 4 cm. Also find its area.

44) Plot the following points in a graph sheet
A(3,1) B(5,-2) C(7,0) D(0,-4) E(-3,-2) F(-4,3)

(or)

Draw the graph of y = 5 x

ANNUAL EXAMINATION - 2025
MATHEMATICS

C

Class : 8 **Marks : 100**
Time : 2.30 Hours

PART - A

I. **Choose the correct answer.** **14 × 1 = 14**

1) The standard form of $\frac{58}{-78}$ is _____.
a) $\frac{28}{-39}$ b) $-\frac{29}{39}$ c) $\frac{29}{39}$ d) $\frac{39}{29}$

2) Which of these rational numbers which have additive inverse?
a) 7 b) -5 c) 0 d) all of these

3) $\sqrt{48}$ is approximately equal to _____.
a) 5 b) 6 c) 7 d) 8

4) What is value of 2^4?
a) 8 b) 16 c) 32 d) 4

5) What is the formula to calculate the area of the parallelogram?
a) A=side^2 b)A= $\frac{1}{2}$ ×b×h c) A=l×b d) A=b×h

6) A line segment which joins any two points on a circle is a _____.
a) chord b) radius c) diameter d) centre

7) The linear equation in one variable has _____ solution.
a) 1 b) 2 c) 3 d) 4

8) What is the value of $2x(3xy-3)$?
a) $6x^2y-9$ b) $6x^2y-3x$ c) $6xy-6x$ d) $6x^2y-6x$

9) Divide: $27y^3$ by $3y$
a) 9 b) $9y^3$ c) $9y^2$ d) $9y$

10) A fruit vendor sells fruits for ₹200 gaining ₹40. Find its gain percentage.
a) 20% b) 22% c) 25% d) $16\frac{2}{3}\%$

11) If 30% of x is 150, then find the value of x.

a) 45 b) 500 c) 5000 d) 50

12) How many measures are needed to form a quadrilateral?

a) 4 b) 5 c) 2 d) 3

13) Histogram is a graph of a _____ frequency distribution.

a) continuous b) discontinuous c) discrete d) none of these

14) How many 2 digit numbers contain the number 7?

a) 10 b) 18 c) 19 d) 20

PART B

II. Answer any TEN questions. **10 × 2 = 20**

15) Find the square root by prime factorisation of 256.

16) Convert the number 467800000000 into scientific notation.

17) Compare $\frac{3}{4}$ and $\frac{5}{6}$.

18) Verify Euler's formula (F+V-E=2): F=6, V=8, E=12

19) Kamalesh has a dining table, circular in shape of radius 70 cm . Find the area of the dining table.

20) Divide: ($32y^2$-8yz) by 2y

21) Factorise the following expression m^2+m-72.

22) Solve: 2x+5=9

23) Which quadrant do the points (4,-3) and (-9,0) lie in?

24) Ranjith bought a washing machine for ₹16150 and paid ₹1350 for its transportation. Then, he sold it for ₹19250. Find his gain or loss percentage.

25) The value of a motor cycle 2 years ago was ₹70000. It depreciates at the rate of 4% p.a. Find its present value.

26) Check whether the sides 30 cm, 40 cm, and 50 cm form a right-angled triangle, using the Pythagoras theorem.

27) Find the range of the data 200, 15, 20, 103, 3, 196.

28) Frame Additive cipher table (KEY = 4)

PART – C

III. Answer any TEN questions. **10 × 5=50**

29) Write the following rational numbers in ascending and descending order.

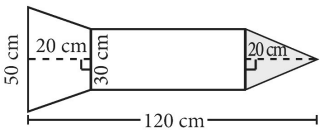
$\frac{-3}{5}, \frac{7}{-10}, \frac{-15}{20}, \frac{14}{-30}, \frac{-8}{15}$

30) Verify the distributive property a × (b + c) = (a × b) + (a × c)for the rational numbers $a = \frac{-1}{2}, b = \frac{2}{3}$ and $c = \frac{-5}{6}$

31) Find the cube root of 24 × 36 × 80 × 25.

32) Solve: $\frac{5^5 \times 5^{-4} \times 5^x}{5^{12}} = 5^{-5}$

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



34) The radius of a sector is 36 cm and and its central angle is 210°. Find the area of the sector?

35) Given the equation y=5+x. Find the missing values?

x	-5		0	
y		7		-1

36) Find m, if $\frac{m+9}{3m+15} = \frac{5}{3}$

37) Find the volume of the cuboid whose dimensions are (x+2),(x-1) and (x-3)

38) A cement factory makes 7000 cement bags in 12 days with the help of 36 machines. How many bags can be made in 18 days using 24 machines.

39) The price of a raincoat was slashed from ₹1060 to ₹901 by a shopkeeper in the rainy season to boost the sales. Find the rate of discount given by him.