Standard 8
MATHS

Time: 1.30 Hrs.   Marks: 50

I. Choose the correct answer: 5×1=5

1) The number of times an observation occurs in the given data is called _____
   a) tally marks   b) data   c) frequency   d) continuous

2) The graphical representation of ungrouped data is _____
   a) histogram   b) frequency polygon
   c) pie chart   d) all of these

3) If the word 'R A D I O' is coded as 'U D G L R', how will 'P H O N E' be coded?
   a) S C G N H   b) V R G N G   c) S K R Q H   d) S D H K Q

4) When I go shopping I will buy
   a) something that looks attractive   b) something my friend has
   c) something that I need to purchase   d) the first thing I see in the store

5) The intersecting point of the line x = 4 and y = –4 is _____
   a) (0, 4)   b) (4, 0)   c) (–4, 4)   d) (4, –4)

II. Fill in the blanks: 4×1=4

6) The upper limit of the class interval (25–35) is _____

7) Histogram is a graphical representation of _____ data.

8) Use Pigpen Cipher Code and write the code for the word 'ALGEBRA' is _____

9) Rectangle is a parallelogram whose all its angles are _____

III. Say True or False: 4×1=4

10) y = –9x not passes through the origin _____

11) Inclusive series is continuous series _____

12) Production of cycles in different years can be represented in a histogram _____

13) The original message is called plain text _____

IV. Answer any three of the following: 3×2=6

14) Frame additive cipher table (key = 5)

15) Convert the given discontinuous series into a continuous series

Class	0-5	6-11	12-17	18-23	24-29
Frequency	7	10	9	5	12

16) Find the best buy of the following purchases Baskar buy 1½ dozen of eggs for Rs.81 and Aruna buy 15 eggs for Rs.64.50?

17) Use Atbash Cipher text fill in the blanks:
   (i) N Z G S V N Z G R X H
   (ii) H L X R Z O   H X R   V M X V

18) Form a continuous frequency distribution table for the marks obtained by 20 students in a X-Std Exam

328, 470, 405, 375, 298, 326, 276, 362, 410, 255, 391, 370, 455, 229, 300, 183, 283, 366, 400, 495

V. Answer any three of the following: 3×5=15

19) 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

20) Construct a histogram from the following distribution of total marks of 40 students in a class

Marks	90-110	110-130	130-150	150-170	170-190	190-210
No.of students	9	5	10	7	4	6

21) Use Ceaser Cipher table set +4 and try to solve the given secret sentence

fvieo mr gshiw ger fi xvmgoc

22) Using given table find the total offer price and prepare a price list for ½ kg Laddu, 1 kg cake, 6 pockets of bread

Fresh Sweets and Bakery Products 20% off		
Laddu (1 Kg) Rs.245	Chocolate Cake (1 kg) Rs.550	1 Bread Pocket Rs.20

23) Match It (using a key - Reflection Table)

i)   J V A Q B J   -   CUBBOARD

ii)   P B Z C H G R E   G N O Y R   -   DOOR

iii)   P U N V E   -   WINDOW

iv)   P H O O B N E Q   -   CHAIR

v)   Q B B E   -   COMPUTER

VI. Answer the following: 2×8=16

24) a) Construct a square RAMP of a diagonal 8 cm. Also find its area.

(OR)

b) Construct a recangle HAND, HA = 7 cm and AN = 4 cm

25) a) Draw the graph of y = x+1.

(OR)

b) Draw the graph of y = −3x.