

**MATHEMATICS**

Time: 1.30 hours

Marks: 80

5 x 1 = 5

**I. Choose the best answer:**

- Data is a collection of  
a) numbers      b) words      c) measurements      d) all the three
- The difference between the largest value and the smallest value of the given data is  
a) range      b) frequency      c) variable      d) none of these
- The graphical representation of grouped data is  
a) bar graph      b) pictograph      c) pie chart      d) histogram
- If the word 'PHONE' is coded as 'SKRQH', how will 'RADIO' be coded?  
a) SCGNH      b) VRGNG      c) UDGLR      d) SDHKQ
- The best shopping choice is to  
a) shop at brand name stores always buy      b) compare the choices before buying  
c) the same things my friends bought      d) buy at a regular shop always

**II. Fill in the blanks :**

3 x 1 = 3

- Pie chart is a \_\_\_\_\_ graph.
- Histogram is a graphical representation of \_\_\_\_\_ data.
- The intersecting point of the line  $x = 4$  and  $y = -4$  is \_\_\_\_\_.

**III. Match the following : (a = 00..... z = 25)**

5 x 1 = 5

- Mathematics - a) 18 20 01 19 17 00 02 19 08 14 13
- Addition - b) 03 08 21 08 18 08 14 13
- Subtraction - c) 12 00 19 07 04 12 00 19 08 02 18
- Multiplication - d) 00 03 03 08 19 08 14 13
- Division - e) 12 20 11 19 08 15 11 15 02 00 19 08 14 13

**IV. Answer any three of the following :**

3 x 2 = 6

- Form an ungrouped frequency distribution table for the weight of 25 students in STD IV.  
25, 24, 20, 25, 16, 15, 18, 20, 25, 16, 20, 16, 15, 18, 25, 16, 24, 18, 25, 15, 27, 20, 20, 27, 25
- Find the range of 53, 42, 61, 9, 39, 63, 14, 20, 06, 26, 31, 04, 57
- Define : Primary Data
- A message like "Good morning written in reverse would instead be "Doog Gnirrom". In the same way decode the sentence given below :  
"ot dnatsrednu taht scitamehtam nac eb decneirepxe erekwreve ni erutan dna laer efil"
- Find the best buy of the following purchase of a pack of 5 chocolate bars for ₹175 or 3 chocolate bars for ₹114?

(2)

VIII Maths

3 x 5 = 15

V. Answer any three of the following :

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

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

20. Draw a histogram for the following data :

Class interval	0-10	10-20	20-30	30-40	40-50	50-60
No. of students	5	15	23	20	10	7

21. The following table gives the number of literate females in the age group 10-45 years in a town.

Age group	10-15	16-21	22-27	28-33	34-39	40-45
No. of females	350	920	850	480	230	200


Draw a histogram to represent the above data.

22. In a study of dental problem, the following data was obtained.

Ages	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of patients	5	13	25	14	30	35	43	50

Construct a histogram and the frequency polygon imposed on it.

23. Find the total special offer price of fresh sweets and bakery products to buy 1/2 kg Laddu, 1 kg Cake, 6 packets of Bread.

FRESH SWEETS AND BAKERY PRODUCTS			
Laddu (1 kg)	Chocolate Cake (1 kg)	Healthy Sliced Bread	
₹245	₹550	₹20	

VI. Answer all the questions :

2 x 8 = 16

24. Construct a rectangle BEAN with BE = 5 cm and BN = 3 cm. Also find its area.

(OR)

Construct a square WEST with WS = 7.5 cm

25. Draw the graph of  $y = -3x$

(OR)

Graph the equation  $y = x + 1$

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