Time: 1.30 Hours

# Standard 8 MATHS <br> Part-A 

Marks: 50
I. Choose the correct answer
1)
a) Rectangle
b) square
c) Rhombus
d) Quadrilateral
2) The range of the data $200,15,20,103,3,196$ is $\qquad$
a) 197
b) 3
c) 20
d) 15
3) $A$ $\qquad$ is a graph of a continuous frequency distribution
a) pie chart
b) frequency polygon
c) Histogram
d) Bar graph
4) Data is a collection of
a) numbers
b) words
c) Measurements
d) all the three
5) In a certain code 'MEDICINE' is coded as 'EOJDJEFM' then how is 'COMPUTER' written in the same code
a) CNPRVUFQ
b) CMNQTUDR
c)RFUVQNPC
d) RNVFTUDQ $5 \times 1=5$
II. Fill in the blanks
6) The upper limit of class interval (25-35) is
7) Pie chart is a $\qquad$ graph
8) The original message is called
9) $\qquad$ is defined as the science which is concerned with communication in secured form.
10) Histogram is a graphical representation of data

## III. Write True or False

11) Comparison of parts of a whole may be done by a pie chart.
12) A pie diagram is a circle broken down into component sectors.
13) If a class size is 10 and range is 80 then the number of classes are 9 .
14) Inclusive series is a continuous series.
15) The process of converting the plain text to the cipher text is called encryption.

## IV. Match the following.

$$
(a=00 \ldots . . . z=25)
$$

16) Mathematics - 1820011917000219081413
17) addition

- 0308210818081413

18) Subtraction - 1200190704120019080218
19) Multiplication - 0003030819081413
20) Division - 1220111908151115020019081413

## Part - B

V. Answer the following (any five)
$5 \times 2=10$
21) Find the range of the given data
$53,42,61,9,39,63,14,20,6,26,31,4,57$
22) Define: Pie chart $y$
23) Represent the following data in ungrouped frequency table which gives the number of children in 25 families

24) Define frequency polygon
25) Frame additive cipher table ( $k e y=4$ )
26) What is cipher text y
27) A message like " Good Morning" written in reverse would instead be "Doog Gninrom". In the same way decode the sentence given below
"ot dantsrednu taht scitamehtam nac eb decneirepxe erehwyreve ni erutan dna laer efil"

## Part - C

VI. Answer the following (any 3)
$3 \times 5=15$
28) 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 |

29) The following table gives the number of literate females in the age group 10 to 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.
30) In a study of dental problem, the following data were obtained

| Age | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No of patients | 5 | 13 | 25 | 14 | 30 | 35 | 43 | 50 |

Represent the above data by a frequency polygon.
31) Use the reflection table and find the correct word
(Hint) : A B ....... M

| $\imath$ | $\imath$ | $\imath$ |
| :--- | :--- | :--- |
| N | O | Z |

i) $J \vee A Q B J$
ii) $P B Z \subset H G R E \quad$ GNOYR
iii) $P \cup N \vee E$
iv) PHOOBNEQ
32) Use Atbase cipher code and find the correct word. Hint: A B z

| $I$ | 1 | 1 |
| :--- | :--- | :--- |
| $Z$ | Y | $A$ |

i) GZNRO
ii) VMTORHS
iii) $N Z G S V N Z G R X H$
iv) $H \times R \vee M X V$
v) $H L X R Z O H X R V M X V$

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Part - D
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VII. Practical Geometry (any one)
33) Construct a rectangle $B E A N$ with $B E=5 \mathrm{~cm}$ and $B N=3 \mathrm{~cm}$. Also find its area.
34) Draw the graph of $y=5 x$.

