



Standard 8

Time Allowed: 1.30 Hours

MATHEMATICS

Maximum Marks: 50

I. Choose the correct answer:

5×1=5

- 1) If the word PHONE is coded as 'SKRQH', how will RADIO be coded?
 a) SCGNH b) VRGNG c) UDGLR d) SDHKQ
- 2) The best shopping choice is to
 a) shop at brand name stores always buy
 b) the same thing my friends bought
 c) compare the choices before buying
 d) buy at a regular shop always
- 3) Inclusive series is a _____ series.
 a) continuous b) discontinuous c) both d) none
- 4) Histogram is a graph of a _____ frequency distribution.
 a) continuous b) discontinuous
 c) discrete d) none
- 5) The graphical representation of grouped data is _____.
 a) bargraph b) pictograph c) pie chart d) histogram

II. Fill in the blanks:

4×1=4

- 6) The upper limit of the class interval 25-35 is _____.
- 7) The total area of the histogram is _____ to the total frequency of the given data.
- 8) Pie chart is a _____ graph.
- 9) The central angle of a component = _____.

III. Answer any 5 questions:

5×2=10

- 10) Convert the discontinuous series into a continuous series.

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

- 11) Frame Additive cipher table (key = 4)
- 12) **Find the best buy of the following purchase:**
 A pack of 5 chocolate bars for ` 175 (or) 3 Chocolate bars for ` 114?
- 13) **Say true or false:**
 (i) Media and business people use pie charts _____.
 (ii) Inclusive series is a continuous series _____.
- 14) **Find the range of the given data :**
 53, 42, 61, 9, 39, 63, 14, 20, 06, 26, 31, 4, 57.
- 15) **Fill in the blanks: (use Atbash Cipher that is given in code 3)**
 (i) V M T O R H S - _____.
 (ii) H X R V M X V - _____.

V8M

2

- 16) Represent the following data in ungrouped frequency table which gives the number of Children in 25 families.

1, 3, 0, 2, 5, 2, 3, 4, 1, 0, 5, 4, 3, 1, 3, 2, 5, 2, 1, 1, 2, 6, 2, 1, 4

IV. Answer any 3 questions.

3×5=15

- 17) A survey gives the information of food items preferred by people. Draw a pie chart for the following information.

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

- 18) 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

- 19) Match the following: (a = 00, Z = 25)

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

- 20) Draw a frequency polygon for the following data without using histogram.

Class interval (Marks)	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	4	6	8	12	10	14	5

- 21) Using the given picture find the total special offer price of fresh sweets and bakery products to buy 1/2 kg laddu, 1 kg cake, 6 pockets of bread.

Fresh Sweets and Bakery products 20% off

Laddu (1 kg)	Chocolate cake (1 kg)	Sliced bread
Rs.245	Rs.550	Rs.20

V. Answer the following:

2×8=16

- 22) a) Draw the graph of $y = x + 1$.

(OR)

- b) Draw the graph of $y = -3x$.

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

(OR)

- b) Construct the following rectangle with the given measurement and find its area.

HAND, HA = 7 cm and AN = 4 cm.