



Ts8M

**Tenkasi District Common Examinations**  
**Common Third Mid Term Test - February 2023**

22-02-2023

**Standard 8**  
**MATHEMATICS**

Time: 1.30 Hours

Marks: 50  
**5×1=5**

**PART - A**

**I. Choose the correct answer.**

- 1) ..... is a parallelogram whose all its angles are right angles.  
 a) square                      b) Rectangle                      c) Rhombus                      d) Quadrilateral
  - 2) The upper limit of the class interval (25 - 35) is .....  
 a) 20                              b) 25                              c) 30                              d) 35
  - 3) Inclusive series is a ..... series.  
 a) continuous                      b) discontinuous                      c) both                              d) none of these
  - 4) A group of letters are given. A numerical code has been given to each letter. These letters have to be unscrambled into a meaningful word. Find out the code for the word so formed from the 4 answers given.
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| L | I | N | C | P | E |
| 1 | 2 | 3 | 4 | 5 | 6 |
- a) 2 3 4 1 5 6                      b) 5 6 3 4 2 1                      c) 6 1 3 5 2 4                      d) 4 2 1 3 5 6
  - 5) If the word 'PHONE' is coded as 'SKRQH' how will 'RADIO' be coded? .....  
 a) SCGNH                              b) VRGNG                              c) UDGLR                              d) SDHKQ

**II. Fill in the blanks**

**5×1=5**

- 6) The line graph for the linear equation is called a .....
- 7) Data has already been collected by some other person is .....
- 8) Histogram is a graphical representation of ..... data.
- 9) A ..... is a line graph for the graphical representation of the continuous frequency distribution.
- 10) ..... is defined as the science which is concerned with communication in secured form.

**III Say True? or False?**

**5×1=5**

- 11) Comparison of parts of a whole may be done by a pie char.
- 12) A pie diagram is a circle broken down into component sectors.
- 13) The graphical representation of grouped data is bar graph.
- 14) A histogram is a graph of a discontinuous frequency distribution.
- 15) A secret key is to use something to generate the lipher text from the plain text.

**IV. Match the following.**

**5×1=5**

(a = 00 ..... z = 25)

- |                    |   |
|--------------------|---|
| 16) mathematics    | - 18 20 01 19 17 00 02 19 08 14 13          |
| 17) addition       | - 03 08 21 08 18 08 14 13                   |
| 18) subtraction    | - 12 00 19 07 04 12 00 19 08 02 18          |
| 19) multiplication | - 00 03 03 08 19 08 14 13                   |
| 20) division       | - 12 20 11 19 08 15 11 15 02 00 19 08 14 13 |

Ts8M

2

PART - B

5x2=10

## V. Answer any 5 questions.

- 21) The weight of 25 students are given below.  
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 weights.

- 22) Convert the given discontinuous series into a continuous series.

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

- 23) 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.

- 24) Define - Frequency polygon.

Particulars	seeds	ploughing	wages	Fertilizer	Harvest	Others
Expenses(Rs.)	2000	6000	10000	7000	8000	3000

1. Find the percentage of the head in which more money had been spent?

2. What percentage of money was spent for seeds?

- 26) Define - Cryptology.

- 27) Use ceasar cipher table set +4 and try to solve the given secret sentence.  
fvieo mr grhiw ger fi xvmgoc

- 28) What is plain text?

PART - C

3x5=15

## VI. Answer any 3 questions.

- 29) Draw a suitable pie chart for the following data relating to the cost of construction of a house.

Particulars	Bricks	Steel	Cement	Timber	Labour	others
expenses	10%	15%	25%	10%	20%	20%

Also, find how much was spent on labour if Rs.55000 was spent for cement.

- 30) 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

- 31) Draw a frequency polygon for the following data using histogram.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of Students	5	8	10	18	25	22	20	13	6	3

- 32) Frame additive cipher table (key = 4)

- 33) i) A message like "Good morning" written in reverse would instead be "Doog Gninrom". In the same way decode the sentence given below.

"ot dnatsrednu taht scitamehtam nac eb decneire pxe erehw yreve ni erutan dna laer efil."

- ii) use Atbash cipher to solve the following

a) VMTORHS

b) NZGSVNZGRXH

PART - D

5x1=5

## VII. Answer any 1 question.

- 34) construct a rectangle HAND with HA = 7cm and AN = 4cm. Also find its area

(OR)

- 35) Graph the equation  $y = x + 1$ .

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