Time: 3 Hrs.

## General Instruction

1. There are 4 Sections in this question paper.
2. The question paper contains 31 questions in four sections
a. Section - A Contains 10 questions carry 1 mark each
b. Section - B Contains 10 questions carry 2 marks each
c. Section - C Contains 10 questions carry 3 marks each
d. Section - D Contains 5 questions carry 6 marks each
3. All questions are compulsory.
4. Do all calculation in the left side of answer sheets.

## SECTION A

1. Identify the property for the below statement

$$
\text { If } a+b=b+a, \text { where } a, b \text { are integers. }
$$

A) Commutative properly
B) associative properly
C) closure properly.
2. In the expression $3 x+100, x$ is a
A ) Constant
B ) Variable
C) Both of these
D) None of these
3. Which postulate is not true for congruency in triangles?
A) RHS
B) SSS
C) SAS
D) AAA.
4. Sum of the angles is a linear pair is
A) 90
B) 180
C) 360
D) 150
5. $\frac{\text { Sum of the numbers }}{\text { Number of observation }}=$ $\qquad$
A) Mean
B) median
C) mode
D) None of these
6. Observe the triangle

Find the value of $x^{0}$

A) $50^{\circ}$
B) $130^{\circ}$
C) $180^{\circ}$
D) $60^{\circ}$
7. $3 \frac{1}{3} \div 10$ is equal to
A) $\frac{1}{2}$
B) $\frac{1}{3}$
C) $\frac{1}{4}$
D) $\frac{1}{5}$
8. What is $12 \frac{1}{2} \%$ of 200 ?
A) 25
B) 5
C) 10
D) 100
9. The angles of a triangle are in the ratio 1:1:2 what is the largest angle?
A) 90
B) 45
C) 30
D) 60
10. The median of the distribution $2,3,4,7,5,1,6$ is
A) 1
B) 2
C) 3
D) 4

## SECTION B (Any 10 Questions)

1. Write a pair of integers whose sum is -7
2. Find the product $(-1) \times(-2) \times(-3) \times 4$
3. Evaluate $0.057 \times 6 \times 2.3$
4. Write 2.034 in expanded form.
5. Find the mode of $7,5,6,9,10,15,16,12,9,10,9,7$
6. Solve $2(x+4)=12$
7. The value of $X$ is 3 construct two equations using $X$.
8. Find $X$, if $\mathrm{p} / / \mathrm{q}$.

9. Find the value of $x$

10. If it possible to have a triangle with sides $1 \mathrm{~cm}, 2 \mathrm{~cm} . \& 3 \mathrm{~cm}$ ? Justify.
11. Find the mean weight (in kg ) of the following data.
3.8,
4.9,
5.7,
2.3,
8.6,
7.8, 1.9,
12. 8

Sumithra sells a washing machine for 13,500 Rs she loses $20 \%$ in the bargain. What was the price at which she brought it?

## SECTION C

1. From the figure using ASA congruency Prove that $\triangle \mathrm{AOC} \cong \triangle B O D$. Diagram

2. $A B C$ is a right triangle with right angle at $C$. If $A B=25 \mathrm{~cm}$ and $A C=7 \mathrm{~cm}$ find $B C$
3. Solve $4+5(P-1)=34$
4. Find the product using suitable identity.
(26) $(-48)+(-48) \times(-36)$
5. Ram purchased $3 \frac{1}{2} \mathrm{~kg}$ apples and $4 \frac{3}{4} \mathrm{~kg}$ mangoes. What is the total weight of fruits purchased by him?
6. Draw an obtuse triangle and construct the altitudes and show that altitudes are congruent
7. Find the difference between 28 km and 4260 m .
8. From the figure, find x.y.z .Give reasons in support of your answer?

9. Find the number, such that one - fifth of the number subtracted by 4 gives 3 .
10. What rate gives 280 Rs as interest on a sum of 56,000 Rs in 2 years?

## SECTION D

1. Ravi's mother age is 5 years more than three times the Ravi age .Find the Ravi's present age, if his mother is 50 years old
2. If $I_{1} \| I_{2}$ and $X=70$, find the value of other angles. Give reasons also.

3. The performance of a student in First Term and Second term Examinations is given .Draw a double bar graph by choosing appropriate scale. Answer the given questions.

| SJUBJECT | ENGLISH | HINDI | MATHS | SCIENCE | SOCIAL |
| :--- | :---: | :---: | :---: | :---: | :---: |
| IST TERM | 67 | 72 | 88 | 81 | 73 |
| II ND TERM | 70 | 65 | 93 | 85 | 75 |

A) In which subject the improvement is most?
B) In which subject the improvement is the least?
4. From the figure, answer the following questions


1. State the three pairs of equal parts in $\triangle B A C$ and $\triangle D A C$.
2. Is $\triangle B A C \cong D A C$ ? Give reason
3. Is $A B=A D$ ? Justify your answer
4. Is $C D=C B$ ? Give reason
5. Is $<\mathrm{B}=<\mathrm{D}$ ?

5) Anitha reads a story book $\frac{3}{4}$ hours every day. Entire book she was in 15 days. How many she used to complete the reading
