53-A

SUMMATIVE ASSESSMENT - I - 2017-2018

MATHEMATICS PAPER - II

(English Medium)

PART - A & B

Class : IX **(Max. Marks : 40)** **Time : 2.45 Hrs.**

Instructions :

1. **15 Minutes are allotted for reading the question paper (Part A &B) in addition to 2.30 hours for writing the answers.**
2. **Part - A answers should be written in a separate answer book.**
3. **There are three Sections in Part - A.**
4. **Answer all the questions.**
5. **Every answer should be visible and legible.**
6. **There is internal choice in Section - III.**
7. **Part-A & B should be given at the beginning of the exam only.**

Marks : 30 **PART-A**

Section - I

Note: 1. Answer all the Questions.

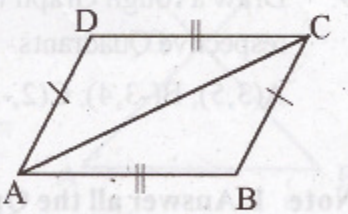
2. Each Question carries 1 Mark $4 \times 1 = 4$

1. Find mode of the following data

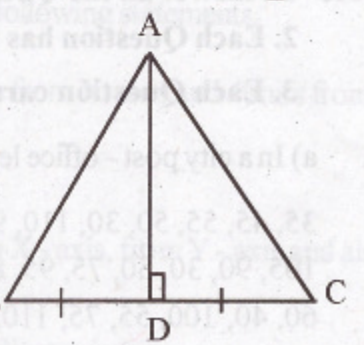
   5, 10, 15, 12, 9, 10, 15, 18

2. Write any two points which lie in the second quadrant of a cartesian plane.

3. ABCD is quadrilateral in which $\overline{AB} = \overline{CD}, \overline{BC} = \overline{AD}$ and AC is the diagonal. Name the congruency rule to prove $\Delta ABC \cong \Delta ACD$



4. In the given diagram $\overline{AD}$ is the altitude which bisects $\overline{BC}$. Is ΔABC is isosceles? Justify your answer.



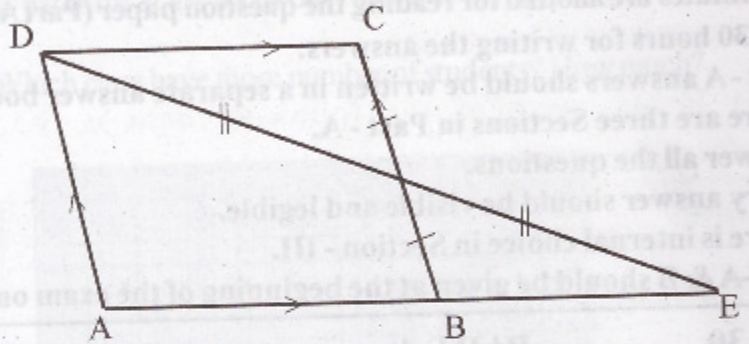
Section - II

Note: 1. Answer all the Questions.

2. Each Question carries 2 Marks **5 × 2 = 10**

5. Find the value of 'p' if the arithematic mean of 10,12,17,13, p is p.

6. By observing the figure write the given information by using symbols



7. In a 50- over cricket match runs scored in last 24 balls are as follows
1,4,0,0,6,1,1,1,4,0,0,0,2,1,0,4,6,6,0,0,0,4,1,0
Find the average score of each ball in last 24 balls.

8. Temparatures of a city in Andhra Pradesh for a certain week are as follows.
(Temparature is in ^{0}C)
36^0, 37^0, 36^0, 35^0, 32^0, 28^0, 34^0
Find the Median and Mode of given data

9. Draw a rough Graph with X, Y - axis and locate the points given below in the respective Quadrants.
A(3,5), B(-3,4), C(2,-3), D(-3,-5)

Section - III

Note: 1. Answer all the Questions.

2. Each Question has internal choice

3. Each Question carries 4 Marks **4 × 4 = 16**

10. a) In a city post - office letters deliverd in 50 working days are given below.

35, 45, 55, 50, 30, 110, 95, 40, 70, 100, 60, 80, 85, 60, 52, 95, 98, 35, 47, 45, 105, 90, 30, 50, 75, 95, 85, 80, 35, 45, 40, 50, 60, 65, 55, 45, 30, 90, 115, 65, 60, 40, 100, 55, 75, 110, 85, 95, 55, 50.

Construct a frequency distribution table inclusive classes having class interval 10.

(OR)

b) Three coins were tossed simulteneausly for 30times. Each time the number of heads occuring was noted down as follows.

1, 2, 3, 2, 3, 1, 1, 1, 0, 3, 2, 1, 2, 2, 1

1, 2, 3, 2, 0, 3, 0, 1, 2, 3, 2, 2, 3, 1, 1

Prepare a frequency distribution table and also greater than cumilative frequencies for the given data.

11. a) If the mean of the following data is 7.5, then find the value of A

Marks	5	6	7	8	9	10
No.of Students	3	10	A	18	8	4

(OR)

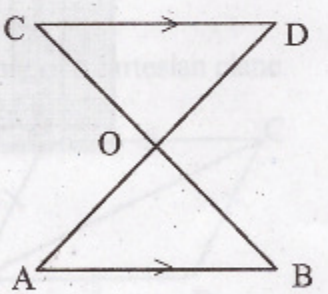
b) Plot the points A (2,2), B (8,2), C (8,5) and D (4,5) in a graph sheet. Join $\overline{AB}, \overline{BC}, \overline{CD}, \overline{AD}$ and find the area of the quadrilataral ABCD in Sq.units.

12. a) Prove that the angles opposite to equal sides of an isoceles triangle are equal.

(OR)

b) In the given figure $\overline{AB}$ is parallel to $\overline{CD}$ and 'O' is the mid - point of $\overline{AD}$.

Show that 'O" is also the mid - point of $\overline{BC}$.



13. Plot the points on the graph sheet using the following statements.

i) A is a point which is at a distance of 6units from X- axis and 4units from Y- axis in Second Quadrant.

ii) Plot B and C whose abscissa is 5 each

iii) D is a point which is equal distance from X - axis, from Y - axis and also from the origin.

iv) E is a point having the sum of the Co-ordinates is 6.

(OR)

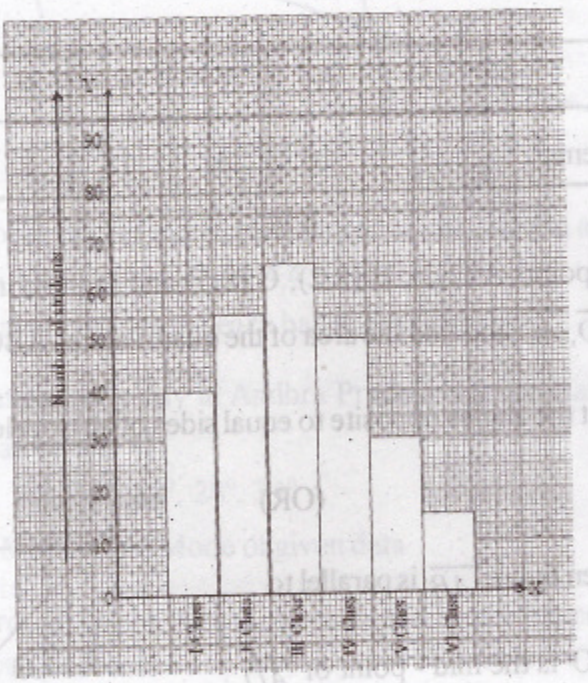
b) Read the following graph and answer the questions.

i) What is name of the figure in the graph

ii) What are the items taken on X- axis and Y- axis.

iii) What is the scale taken on Y - axis?

iv) Which class have more number of students? How much?



Regd.No. | **53-B** | Marks:

SUMMATIVE ASSESSMENT - I - 2017- 2018

MATHEMATICS PAPER- II

(English Medium)

Class IX

Part - B

Time : 30minutes **Marks : 10**

Acadamic Standards	Problem Solving						Reasoning				Commu nication		Connetion			Visnalism	
Q.NO.s	1	2	5	10	11	14-21	3	4	12	22-25	6	26-29	7	8	30-33	9	13
Marks																	
Total Marks																	

Name of the Student : ..... **Roll No.:** .....

Note:

1. **Answer all question in Part - B**
2. **Each Question has 4 options. Write the capital letter indicating the answer in the given brackets.**
3. **Marks are not awarded for over writing answers.**
4. **All questions carry equal marks. .**

14. Arthematic Mean of Prime numbers between 10 to 20 ( )

A) 13 B) 15 C) 17 D) 19

15. ΔABC and ΔPQR are Congruent. If $\angle BAC = \angle QPR = 70^0$ and $\angle ACB = \angle ABC$ then $\angle PQR =$ ( )

A) 75^0 B) 70^0 C) 60^0 D) 55^0

16. Which among these points lies on X - axis ( )

L(0,4), M(4,0), N(0,6), O(0,0)

A) L and M B) M and O C) O only D) M only

17. Which of the following point is $\sqrt{2}$ units of distance from the origin ( )

A) $(\sqrt{2}, \sqrt{2})$ B) (1,1) C) (2,2) D) (4,4)

18. $\Delta ABC \cong \Delta KLM$. *If* $\overline{AB} = 2x, \overline{BC} = 3y, \overline{AC} = 2x + y$ *and* $\overline{KL} = 6cm, \overline{LM} = 2x$, *then* $\overline{KM}$ = ( )

A) 8cm B) 9 cm C) 7 cm D) 6 cm

19. For Which of the following Mean and Median are equal ( )

A) 4, 4, 5 B) 4, 6, 5 C) 5, 4, 5 D) 0, 1, 3

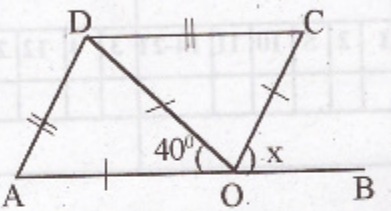
20. If the point (-x, -y) lies in first Quadrant then ( )

A) $x > 0, y > 0$ B) $x < 0, y < 0$

C) $x > 0, y < 0$ D) $x < 0, y > 0$

21. From the given diagram find the value of x . ( )

(Note: A,O,B are on a line)



A) 40^0

B) 70^0

C) 100^0

D) 80^0

22. Check for which of the following Median is 3.5 ( )

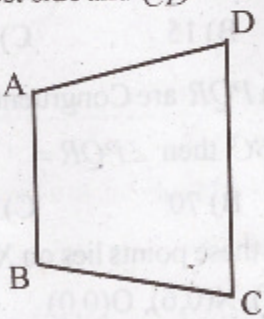
A) 3, 6, 5, 3, 4, 3 B) 3, 5, 5, 3, 3, 5

C) 4, 3, 4, 5, 4, 3 D) 3, 4, 5, 6,7, 8

23. If point (x, y) lies on $\overrightarrow{OX}$ (positive X - axis), then point (y, 5) lies ( )

A) $\overrightarrow{OX}$ B) $\overrightarrow{OY}$ C) $\overrightarrow{OX^1}$ D) $\overrightarrow{OY^1}$

24. In the given figure $\overline{AB}$ is the smallest side and $\overline{CD}$ is the biggest, then which of these is true ( )



A) $\angle A > \angle C$

B) $\angle C > \angle A$

C) $\angle B > \angle D$

D) Both A and C

25. Janaki while finding Median for an ungrouped data write B as 5. She has taken the scores as 3,6,4,7,5 by leaving one of the score given. If the answer is correct even though she left one score, the score that she left is ( )

A) 4 B) 5 C) 6 D) 7

26. Which of the following represents the formula for mean ( )

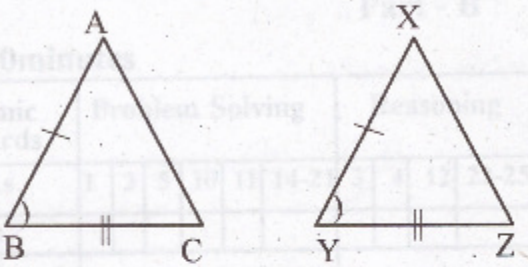
A) $\sum x_i = \frac{\bar{x}}{n}$ B) $\bar{x} = \frac{\sum xi}{n}$ C) $\bar{x} = \frac{n}{\sum xi}$ D) $\bar{x} . \sum x_i = n$

27. Abscissa (x-coordinade) in the point (-5, -8) is ( )

A) -5 B) -8 C) (-5, -8) D) -13

28. Lower boundaires of classes 70 - 79, 80 - 89 are ( )

A) 70.5, 79.5 B) 69.5, 79.5 C) 70.5, 80.5 D) 69.5, 89.5

29. 

which congruency rule satisfy

$\Delta ABC \cong \Delta XYZ$ in the above figures ( )

A) A. S. A B) S. A. S C) S. S. S D) A. A. A

30. If the point (x+y, x-y) lies equal distances from x and y axis then one of the solution for (x,y) is ( )

A) (5, 5) B) (0, 0) C) (-5, -5) D) (2, -2)

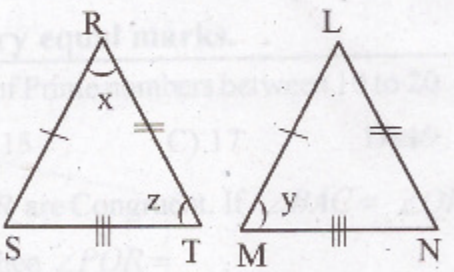
31. In the given figure if $6x = 4y = 3z$ then the value of x = ( )

A) 40^0

B) 60^0

C) 80^0

D) 100^0



32. If the sides of a triangle XYZ are in 3 : 4 : 5 and $\Delta XYZ \cong \Delta ABC$ and $\overline{AB} = 4.5cm$ then $\overline{YZ}$ = ( )

A) 4 cm B) 5 cm C) 6 cm D) 7.5 cm

33. In ΔDEF $\overline{DE}$ is greater than $\overline{EF}$ by 2cm and lesser than $\overline{DF}$ by 3cm. If $\Delta DEF \cong \Delta PQR$ and $\overline{PR} = 9cm$ then $\overline{DE}$ = ( )

A) 4 cm B) 5 cm C) 7 cm D) 6 cm