SET - II

SUMMATIVE ASSESSMENT - I - 2016-2017
MATHEMATICS - Paper - II
(English Version)
PART - A & B

Class : IX **Max. Marks : 40** **Time : 2:45Hrs.**

Marks : 30 **Part - A**

Instructions:

1. **15 minutes of time is alloted for reading the question paper.**
2. **Answer <u>ALL</u> questions.**
3. **Answer for questions under Part-A should be written in a separate answer book.**
4. **There is internal choice for questions in Section-III, Part-<u>A</u>.**

SECTION - I

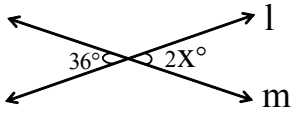
Note:

(i) Answer all questions.

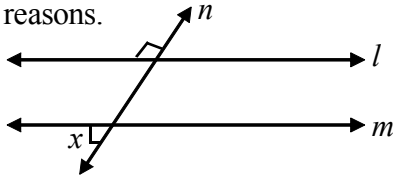
(ii) Each question carries 1 mark. **4 x 1 = 4 Marks**

1. "Sum of all angles in a triangle is 180". Express this statement in mathematical notation.

2. Find the value of X from the given figure.



3. Find 'x' from the adjacent figure. Give reasons.



4. Find the value of 'p', if the mean of the data 10, 12, 18, 10, p is 10.

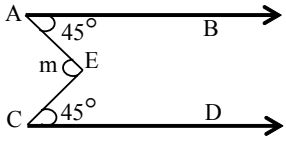
SECTION - II

Note:

(i) Answer all questions.

(ii) Each question carries 2 marks. **5 x 2 = 10 Marks**

5. From adjacent figure if $\overline{AB}$ // $\overline{CD}$ then find the value of m.



6. If A,B,C are the points on a straight line and B lies between A and C, then prove that $\overline{AC}$-$\overline{AB}$ = $\overline{BC}$

7. Describe the terms $\overline{X}$, $\Sigma X\dot{i}$ and n in the formula $X = \frac{\sum xi}{n}$

8. Telephone department received applications for the post of operator. The number of applications received by the evening of first day, second day, third day and fourth day are 15, 40, 85 and 100 respectively. Frame the freequency distribution table to the above information.

9. Two supplementary angles are in the ratio 4:5. Find the angles.

SECTION - III

Note:

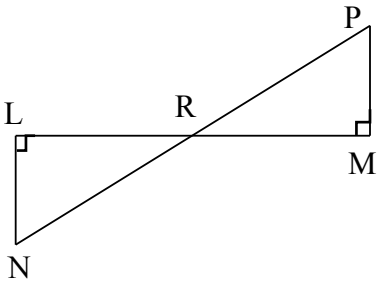
1. **Answer all the questions.**
2. **Choose any one from each question.**
3. **Each question carries 4 marks.** **4 x 4 = 16 Marks**

10. (a) Construct an equilateral traingle whose side 6 cm.

(OR)

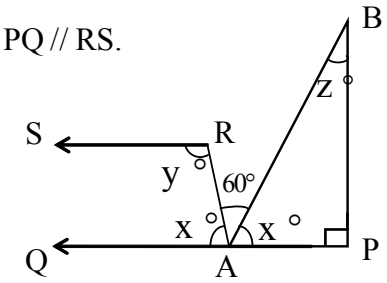
(b) In a quadrilateral ABCD, AD = BC; the intersecting point of AC, BD is 'o' and ∠DAB = ∠CBA. Express this information in figure form and write the names ot triangles formed in that figure.

11. (a) In the given figure LM, NP intersects at R, $\angle L = 90°$, $\angle N = 45°$ and $\angle M = 90°$. Findthe value of $\angle LRN$, $\angle PRM$ and $\angle P$.

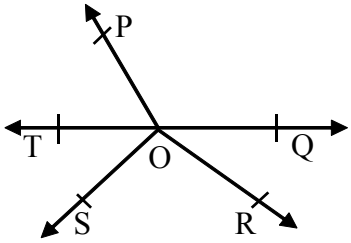


(OR)

(b) Find the values of x, y and z when PQ // RS.



12. (a) In the adjacent figure $\overrightarrow{OP}$, $\overrightarrow{OQ}$, $\overrightarrow{OR}$ and $\overrightarrow{OS}$ are four rays. Prove that $\angle POQ + \angle QOR + \angle SOR + \angle POS = 360^0$



(OR)

(b) Find Mean and Mode of the data is 6,12,14,7,8,14,16. If an observation 3 is added above data. Find the Mean and Mode of the resultent data. Reason why the changes in Mean and Mode are different.

13. (a) The average length of the line segments $\overline{AB}$, $\overline{CD}$, $\overline{ED}$ and $\overline{GH}$ is 45 cm and $\overline{AB}$ = 60 cm; $\overline{GH}$ = 40 cm and $\overline{CD}$ = $\overline{EF}$. find the median of the lengths of $\overline{AB}$, $\overline{CD}$, $\overline{EF}$ and $\overline{GH}$.

(OR)

(b) In a cinema theatre Rs. 60 tickets 40, Rs. 80 tickets 72, Rs. 100 tickets 78 and Rs. 120 tickets 60 are soled. Propare a table to the above data and find mean.

SET - II

SUMMATIVE ASSESSMENT - I - 2016-2017
MATHEMATICS -Paper - 2
(English Version)
PART - B

Class : IX **Marks : 10**

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

	AS-1					AS-2				AS-3			AS-4		AS-5		Total	Grade
Q.No	2	4	5	11	14 - 29	3	6	12	30 - 31	1	7	32 - 33	9	13	8	10		
Marks																		
Total																		

Marks : 10 **Part - B**

Instructions:

1. **Answer all the questions 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 witing answers.**
4. **All questions carry equal marks.**

SECTION - IV

Instructions:

1. **Answer all the questions.**
2. **Each question carries ½ mark.** **20 x ½ = 10 Marks**

14. Number of measurements required to construct a cube. **[ ]**

A) 4 B) 3 C) 2 D) 1

15. Number of right angles in a triangle. **[ ]**

A) 4 B) 3 C) 2 D) 1

16. Ratio of two complimentary angles is 1 : 1 then the angles are **[ ]**

A) 90°, 90° B) 45°, 45° C) 60°, 60° D) 30°, 30°

17. Each angle in an equilateral triangle. [ ]

A) 60° B) 45° C) 90° D) 180°

18. 45°, 45° are the angles in a closed figure formed by three sides, then that figure is [ ]

A) Triangle B) Isosceles triangle

C) Right angled triangle D) Right angled isosceles triangle

19. Mode of 6, 7, 8, 9, 6, 7, 8, 6, 7, 6 is [ ]

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

20. Mean of the angles in rectangle is [ ]

A) 45° B) 90° C) 60° D) 180°

21. The number of faces in a cuboid. [ ]

A) 6 B) 4 C) 2 D) 10

22. The author of "The Elements" [ ]

A) Eculid B) Pythagoras C) Thales D) Both B and C

23. The corresponding angles in parallel lines are $2k + 7$, 45° then the value of 'k' is [ ]

A) 18° B) 19° C) 20° D) 21°

24. The external angle in a triangle is 'p' and two non-adjacent interior angles of 'p' are 35°, 45° then the value of 'p' is [ ]

A) 60° B) 70° C) 80° D) 90°

25. Sides of two squares are equal then [ ]

A) Diognals are equal B) Angles are equal

C) Perimeters are equal D) Those are congruent.

26. The biggest angle in a right angled triangle is [ ]

A) Right angle B) Equal to the sum of remaining two angles

C) A and B are correct D) None of these

27. Median of the first eight Prime numbers [ ]

A) 8 B) 9 C) 7 D) 11

28. Average of a, b, c is 10 then the average of a+5, b+5, c+5 is [ ]

A) 15 B) 20 C) 25 D) 30

29. Mode subject in your school time table subjects is [ ]

A) Telugu B) Mathematics C) English D) Social Studies

30. If alternative angles are equal, then the lines are ___ [ ]

A) Coinside B) Perpendicular C) Intersecting D) Parallel

31. Which pair of the following angles become supplementary angles [ ]

A) $40^\circ, 50^\circ$ B) $300^\circ, 60^\circ$ C) $110^\circ, 70^\circ$ D) $45^\circ, 45^\circ$

32. 'Δ' is symbol for [ ]

A) Square B) Circle C) Triangle D) Rectangle

33. Match the following. [ ]

p) $\perp$	X) is congruant
q) $\cong$	y) Is parallel
r) //	Z) Perpendicular

A) p - X; q - y; r - Z B) p - Z; q - y; r - X

C) p - Z; q - X; r - y D) p - X; q - Z; r - y