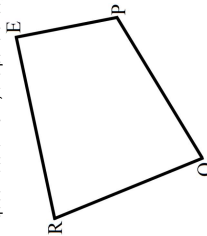


Instructions

1. New section on new page
2. Rough work on right hand side
3. Keep the timer & make sure to spare 10 min for rechecking your paper
4. Honesty is the best policy. Good Luck.

SECTION-A

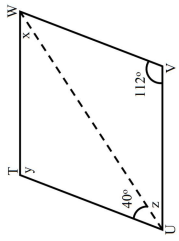
- Q1. What is the sum of all angles of a hexagon?
A 180° **B** 360° **C** 540° **D** 720° **1 Mark**
- Q2. Two adjacent angles of a parallelogram are in the ratio 1:5. Then all the angles of the parallelogram are:
A 30°, 150°, 30°, 150° **B** 85°, 95°, 85°, 95° **C** 45°, 135°, 45°, 135° **D** 30°, 180°, 30°, 180° **1 Mark**
- Q3. In a kite, what is false?
A The diagonals are perpendicular to each other. **B** The diagonals bisect each other.
C Only one pair of opposite angles is equal. **D** All the four sides are equal. **1 Mark**
- Q4. If PQRS is a parallelogram, then $\angle P - \angle R$ is equal to.
A 60° **B** 90° **C** 80° **D** 0° **1 Mark**
- Q5. The angles of a quadrilateral are in ratio 1 : 2 : 3 : 4. Which angle has the largest measure?
A 98° **B** 36° **C** 120° **D** 144° **1 Mark**
- Q6. Tick the correct answer in the following?
 The measure of each exterior angle of a regular polygon is 40°. How many sides does it have?
A 8 **B** 9 **C** 6 **D** 10 **1 Mark**
- Q7. The angles P, Q, R and S of a quadrilateral are in the ratio 1:3:7:9. Then PQRS is a:
A parallelogram **B** trapezium with $PQ \parallel RS$ **C** trapezium with $QR \parallel PS$ **D** kite **1 Mark**
- Q8. The number of sides of a regular polygon whose each interior angle is of 135° is:
A 6 **B** 7 **C** 8 **D** 9 **1 Mark**
- Q9. A quadrilateral whose all sides, diagonals and angles are equal is a.
A square **B** trapezium **C** rectangle **D** rhombus **1 Mark**
- Q10. Which of the following statements are true for a rhombus?
 It is a parallelogram.
1 Mark
- Q11. A quadrilateral can be constructed uniquely if its three sides and _____ angles are given. **1 Mark**
- Q12. In quadrilateral ROPE, the pairs of adjacent angles are _____.



- Q13. A photo frame is in the shape of a quadrilateral. With one diagonal longer than the other. Is it a rectangle? Why or why not?
1 Mark
- Q14. Can a quadrilateral ABCD be a parallelogram if $\angle A = 70^\circ$ and $\angle C = 65^\circ$?
 Explain how a square is. **1 Mark**
- A parallelogram

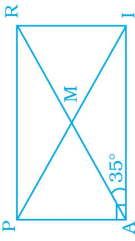
SECTION-B

- Q16. The following figures are parallelograms. Find the degree values of the unknowns x, y, z. **2 Marks**

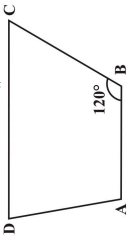


Q17. The sides of a rectangle are in the ratio 5 : 4 and its perimeter is 90cm. Find its length and breadth. **2 Marks**

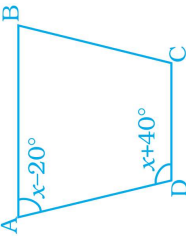
Q18. In rectangle PAIR, find $\angle ARI$, $\angle RMI$ and $\angle PMA$. **2 Marks**



Q19. Find $m\angle C$ in Fig if $\overline{AB} \parallel \overline{DC}$ **2 Marks**



Q20. Find the value of x in the trapezium ABCD given below. **2 Marks**

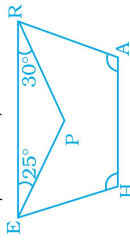


Q21. Quadrilateral EFGH is a rectangle in which J is the point of intersection of the diagonals. Find the value of X if $JF = 8X + 4$ and $EG = 24X - 8$. **3 Marks**

Q22. In a quadrilateral PQRS, $\angle P = 50^\circ$, $\angle Q = 50^\circ$, $\angle R = 50^\circ$, Find $\angle S$. Is this quadrilateral convex or concave? **3 Marks**

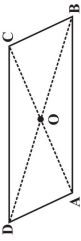
Q23. In a quadrilateral HOPE, PS and ES are bisectors of $\angle P$ and $\angle E$ respectively. Give reason. **3 Marks**

Q24. In trapezium HARE, EP and RP are bisectors of $\angle E$ and $\angle R$ respectively. Find $\angle HAR$ and $\angle EHA$. **3 Marks**



SECTION-C

Q25. Given a parallelogram ABCD. Complete each statement along with the definition or property used. **4 Marks**



1. $\angle ADO = \dots$
2. $\angle DCB = \dots$
3. $OC = \dots$
4. $m\angle DAB + m\angle CDA = \dots$

Q26. ABCD is a rhombus such that the perpendicular bisector of AB passes through D. Find the angles of the rhombus. Hint: Join BD. Then $\triangle ABC$ is equilateral. **4 Marks**

Q27. In the following figure RISK and CLUE are parallelograms. Find the measure of x. **5 Marks**

