



BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY | CO-ED DAY CUM BOYS' RESIDENTIAL
SCHOOL



POST MID TERM EXAMINATION (2025)

MARKING SCHEME

Class : IX
Date : 07-01-2025

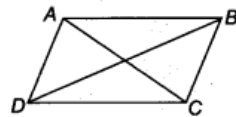
Duration: 1 Hr
Max. Marks: 25

I. Multiple choice questions. 1 mark for each question.

1. 110° [D]
2. 85 [C]
3. 8 [A]
4. 50° [C]
5. Triangle [C]

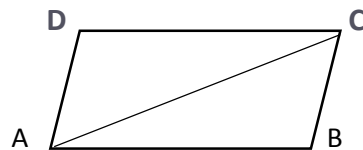
6. Mean = $2 + 4 + 6 + 8 + 10 + 12 + 14 + 16$ 1
 $= \frac{72}{8}$ $\frac{1}{2}$
 $= 9$ $\frac{1}{2}$

7. Let ABCD is a parallelogram such that $AC = BD$.



- In $\triangle ABC$ and $\triangle DCB$,
- $AC = DB$ [Given] $\frac{1}{2}$
- $AB = DC$ [Opposite sides of a parallelogram]
- $BC = CB$ [Common] $\frac{1}{2}$
- $\therefore \triangle ABC \cong \triangle DCB$ [By SSS congruency]
- $\Rightarrow \angle ABC = \angle DCB$ [By C.P.C.T.] $\frac{1}{2}$
- $\angle ABC + \angle DCB = 180^\circ \dots (2)$ [Co-interior angles]
- $\angle ABC = \angle DCB = 90^\circ$ $\frac{1}{2}$
- ABCD is a parallelogram having an angle equal to 90° .

8. Theorem Prove that the diagonaltriangles



- Proof : In $\triangle ABC$ and $\triangle CDA$
- $\angle BAC = \angle DCA$ $\frac{1}{2}$
- $\angle BCA = \angle DAC$ $\frac{1}{2}$
- Alternate angles

AC = AC	common	$\frac{1}{2}$
$\Delta ABC \cong \Delta CDA$	ASA rule	$\frac{1}{2}$
9. In ΔAPB and ΔCQD ,		
$\angle APB = \angle CQD$	[Each 90°]	$\frac{1}{2}$
AB = CD	[\because Opposite sides of a parallelogram]	$\frac{1}{2}$
$\angle ABP = \angle CDQ$	Alternate angles	$\frac{1}{2}$
$\Delta APB \cong \Delta CQD$	By AAS congruency	$\frac{1}{2}$
AP = CQ	[By C.P.C.T.]	
10. For adequate labelling and using scale		
		1
For correct construction of Histogram		
		2
11. For adequate labelling and using scale		
		1
For correct construction of Histogram		
		2
12. D is a mid point of AC		
DM \parallel BC		
M is mid point of AB		
		$\frac{1}{2}$
ii) $\angle ADM = \angle ACB$	corresponding angles	$\frac{1}{2}$
$\angle ADM = 90^\circ$		
MD perpendicular AC		
		$\frac{1}{2}$
iii) . In ΔADM and ΔCDM		
AD = DC	D is mid point	
DM = DM	common	$\frac{1}{2}$
$\angle ADM = \angle CDM$	Each 90°	$\frac{1}{2}$
$\Delta ADM \cong \Delta CDM$	SAS rule	
AM = CM	CPCT	$\frac{1}{2}$
CM = $\frac{1}{2}$ AB		$\frac{1}{2}$
13. P and Q are mid points of AB and BC		
		$\frac{1}{2}$
PQ \parallel AC and $PQ = \frac{1}{2}$ AC	----- (i) mid point theorem	$\frac{1}{2}$
S and R mid points of AD and DC		
		$\frac{1}{2}$
SR \parallel AC and $SR = \frac{1}{2}$ AC	ii)	$\frac{1}{2}$
From i and ii		
PQ \parallel SR and PQ = SR		$\frac{1}{2}$
\therefore PQRS is a parallelogram , same pair parallel and equal.		
