Coordinate Geometry

MCQ Questions

- 1. If the coordinates of a point are (0, -4), then it lies in:
- a) X-axis
- b) Y-axis
- c) At origin
- d) Between x-axis and y-axis
- 2. If the coordinates of a point are (3, 0), then it lies in:
- a) X-axis
- b) Y-axis
- c) At origin
- d) Between x-axis and y-axis
- 3. If the coordinates of a point are (-3,4), then it lies in:
- a) First quadrant
- b) Second quadrant
- c) Third quadrant
- d) Fourth quadrant

4. If the coordinates of a point are (-3,-4), then it lies in:
a) First quadrant
b) Second quadrant
c) Third quadrant
d) Fourth quadrant
5. The name of horizontal line in the cartesian plane which determines the position of a point is called:
a) Origin
b) X-axis
c) Y-axis
d) Quadrants
6. The name of vertical line in the cartesian plane which determines the position of a point is called:
a) Origin
b) X-axis
c) Y-axis
d) Quadrants

7. The section formed by horizontal and vertical
lines determining the position of point in a cartesian
plane is called:

- a) Origin
- b) X-axis
- c) Y-axis
- d) Quadrants
- 8. Points (1,2), (-2,-3), (2,-3);
- a) First quadrant
- b) Do not lie in the same quadrant
- c) Third quadrant
- d) Fourth quadrant
- 9. If the x-coordinate of a point is zero, then this point lies:
- a) In II quadrant
- b) In I quadrant
- c) On x-axis
- d) On y-axis

10. If the perpendicular distance of a point P from the x-axis is 7 units and the foot of the perpendicular lies on the negative direction of x-axis, then the point P has:

- a) y-coordinate = 7 or -7 only
- b) y-coordinate = 7 only
- c) y-coordinate = -7 only
- d) x-coordinate = -7

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ASSERTION REASONING QUESTIONS

DIRECTION: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as: (a)Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

- (b)Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- (c)Assertion (A) is true but reason (R) is false.
- (d)Assertion (A) is false but reason (R) is true.
- **1. Assertion:** The abscissa of a point (5, 2) is 5. **Reason:** The perpendicular distance of a point from y-axis is called its abscissa.
- **2. Assertion:** The point (0, 4) lies on y -axis. **Reason:** The x co-ordinate on the point on y -axis is zero.
- **3. Assertion:** The point (-2, 0) lies on y -axis and (0, 4) on x -axis.

Reason: Every point on the x -axis has zero distance from x -axis and every point on the y -axis has zero distance from y -axis.

4. Assertion: Point (4, -2) lies in IV quadrant. **Reason:** The perpendicular distance of a point from y-axis is called its abscissa.

5. Assertion: The points (-1, 2) and (2,-1) are at different positions in the coordinate plane. **Reason:** Point (-1, 2) lies in II-quadrant and (2,-1) lies in IV quadrant.

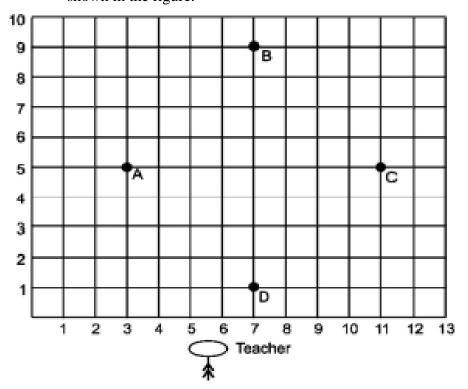
6. Assertion: If the ordinate of a point is equal to its abscissa, then the point lies either in the first quadrant or in the second quadrant. **Reason:** A point both of whose coordinates are negative will lie in third quadrants.

- **7. Assertion:** The perpendicular distance of the point A(3, 4) from the y-axis is 4 **Reason:** The perpendicular distance of a point from y-axis is called its x-coordinate.
- **8. Assertion:** Point *A*(-2, -4) lies on III quadrant **Reason:** A point both of whose coordinates are negative lies in III quadrant.
- **9. Assertion:** A point whose abscissa is -3 and ordinate is 2 lies in second quadrant **Reason:** Points of the type (-, +) lie in the second quadrant.
- **10. Assertion:** A point whose abscissa is 2 and ordinate is -3 lies in fourth quadrant **Reason:** Points of the type (-, +) lie in the second quadrant.

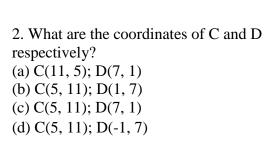
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a)	a)	d)	b)	a)	d)	d)	a)	a)	b)

CASE STUDY

Students of a school are standing in rows and columns in their playground for a drill practice. A, B, C and D are the positions of four students as shown in the figure.



- 1. What are the coordinates of A and B respectively?
- (a) A(3, 5); B(7, 8)
- (b) A(5, 3); B(8, 7)
- (c) A(3, 5); B(7, 9)
- (d) A(5, 3); B(9, 7)



- 3. What is the distance between B and D?
- (a) 5 units
- (b) 14 units
- (c) 8 units
- (d) 10 units
- 4. What is the distance between A and C?
- (a) 5 units
- (b) 14 units
- (c) 8 units
- (d) 10 units
- 5. What are the coordinates of the point of intersection of AC and BD?
- (a)(7,5)
- (b)(5,7)
- (c)(7,7)
- (d)(5,5)

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	1(a)	2(0)	3(c)	4(c)	5(0)
	1(c)	2(a)	.)(()	4(0)	5(a)
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