Exercise 3.2

Question: 1 Write the answer of each of the following questions:

(i) What is the name of horizontal and the vertical lines drawn to determine the position of any point in the Cartesian plane?
(ii) What is the name of each part of the plane formed by these two lines?
(iii) Write the name of the point where these two lines intersect
Answer.:

(i) X-axis and Y-axis are the name of horizontal lines and vertical lines drawn to determine the position of any point in the Cartesian plane respectively.
(ii) The name of each part of the plane formed by these two lines is:
a) 1st quadrant (+x, +y)

b) 2^{nd} quadrant (-x, +y)

c) 3^{rd} quadrant (-x, -y)

d) 4^{th} quadrant (x, -y)

(iii) origin is termed as the point of intersection of these two lines.

Question: 2 See Fig. 3.14, and write the following:
(i) The coordinates of B
(ii) The coordinates of C
(iii) The point identified by the coordinates (-3, -5)
(iv) The point identified by the coordinates (2, -4)
(v) The abscissa of the point D

(vi) The ordinate of the point H
(vii) The coordinates of the point L
(viii) The coordinates of the point M

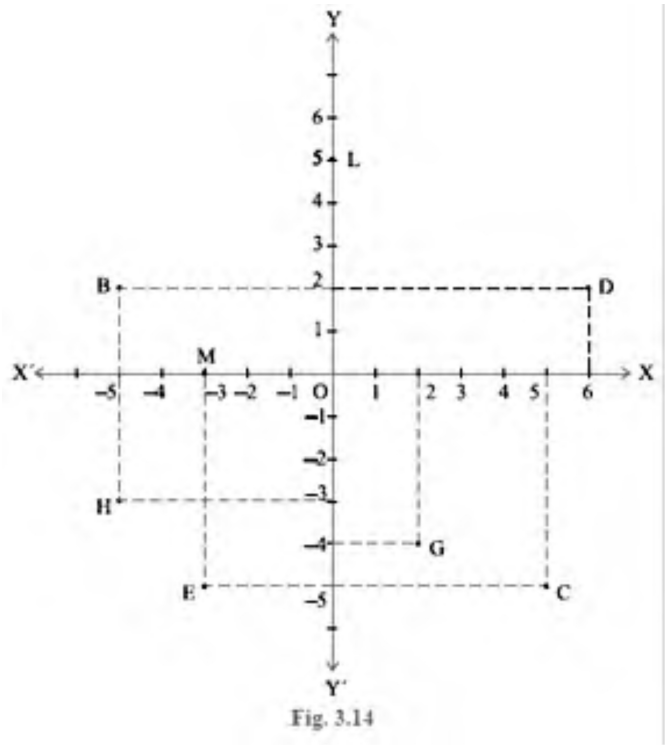

Fig. 3.14

Answer:

For notifying the points shown in the graph. First look at the horizontal distance of points from Origin.

Then look at the vertical distance of point from origin. Distance measured to the right of origin is positive x axis. And distance measured to the top of origin is positive y axis. And similarly left and bottom shows negative x axis and negative y axis respectively.

(i) The coordinates of B are (-5, 2)

(ii) (5, -5) is the coordinate of C.

(iii) E is identified by the coordinates (-3, -5).

(iv) G is the point identified by the coordinates (2, -4)

(v) Abscissa means x coordinate of point D.
Hence, abscissa of the point D is 6

(vi) Ordinate means y coordinate of point H.
Hence, ordinate of point H is -3

(vii) The coordinates of the point L is (0, 5)

(viii) The coordinates of the point M is (-3, 0)