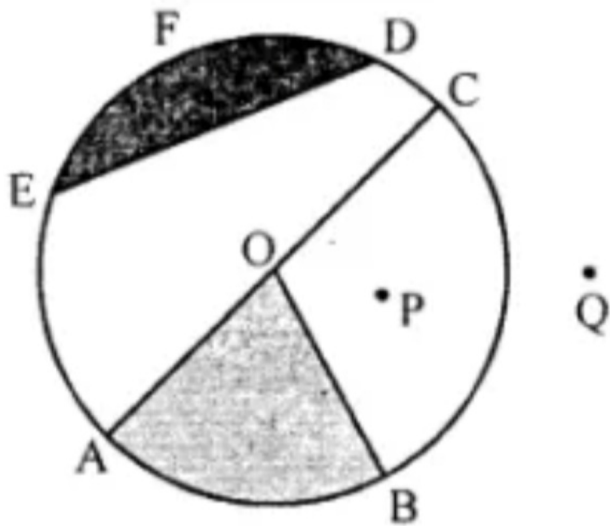


Question 1.

In the given figure, identify:

- (i) the centre of the circle
- (ii) three radii
- (iii) a diameter
- (iv) a chord
- (v) two points in the interior
- (vi) a point in the exterior
- (vii) a sector
- (viii) a segment



Solution:

- (i) O is the centre of the circle.
- (ii)  $\overline{OA}$ ,  $\overline{OB}$ ,  $\overline{OC}$  are three radii of the circle.
- (iii)  $\overline{AC}$  is a diameter of the circle.
- (iv)  $\overline{ED}$  is a chord of the circle.
- (v) O and P are two points in the interior.
- (vi) Q is a point in the exterior.
- (vii) OAB (shaded portion) is a sector of the circle.
- (viii) Shaded portion of the circular region enclosed by line segment ED and the corresponding arc.

## Question 2.

State whether the following statements are true (T) or false (F):

- (i) Every diameter of a circle is also a chord.
- (ii) Every chord of a circle is also a diameter.
- (iii) Two diameters of a circle will necessarily intersect.
- (iv) The centre of the circle is always in its interior.

Solution:

- (i) True.
- (ii) False.
- (iii) True.
- (iv) True.