

## 10

## CIRCLES

## EXERCISE 10.1

**Q.1.** Fill in the blanks :

- (i) The centre of a circle lies in \_\_\_\_\_ of the circle. (exterior/interior)
- (ii) A point, whose distance from the centre of a circle is greater than its radius lies in \_\_\_\_\_ of the circle. (exterior/interior)
- (iii) The longest chord of a circle is a \_\_\_\_\_ of the circle.
- (iv) An arc is a \_\_\_\_\_ when its ends are the ends of a diameter.
- (v) Segment of a circle is the region between an arc and \_\_\_\_\_ of the circle.
- (vi) A circle divides the plane, on which it lies in \_\_\_\_\_ parts.

**Sol.** (i) interior (ii) exterior (iii) diameter (iv) semicircle (v) the chord (vi) three

**Q.2.** Write True or False: Give reasons for your answers.

- (i) Line segment joining the centre to any point on the circle is a radius of the circle.
- (ii) A circle has only finite number of equal chords.
- (iii) If a circle is divided into three equal arcs, each is a major arc.
- (iv) A chord of a circle, which is twice as long as its radius, is a diameter of the circle.
- (v) Sector is the region between the chord and its corresponding arc.
- (vi) A circle is a plane figure.

**Sol.** (i) True (ii) False (iii) False (iv) True (v) False (vi) True