KINETICS
We Nurture The Future
IIT-JEE | Medical | Foundations

Circles

Question 1.
If there are two separate circles drawn apart from each other, then the maximum number of common points they have:
(a) 0
(b) 1
(c) 2
(d) 3

Answer: (a) 0

Question 2.
D is diameter of a circle and AB is a chord. If AD = 50 cm, AB = 48 cm, then the distance of AB from the centre of the circle is
(a) 6 cm
(b) 8 cm
(c) 5 cm
(d) 7 cm

Answer: (d) 7 cm

Question 3.
In a circle with center O and a chord BC, points D and E lie on the same side of BC. Then, if$\angle BDC=80°$, then $\angle BEC$ =
(a) 80°
(b) 20°
(c) 160°
(d) 40°

Answer: (a) 80°

Question 4.
The center of the circle lies in_____ of the circle.

(a) Interior
(b) Exterior
(c) Circumference
(d) None of the above

Answer: (a) Interior

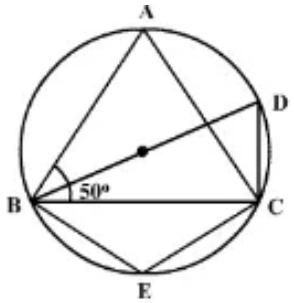
Question 5.
If chords AB and CD of congruent circles subtend equal angles at their centres, then:
(a) AB = CD
(b) AB > CD
(c) AB < AD
(d) None of the above

Answer: (a) AB = CD

Question 6.
Segment of a circle is the region between an arc and ……..of the circle.
(a) perpendicular
(b) radius
(c) chord
(d) secant

Answer: (c) chord

Question 7.
In the figure, triangle ABC is an isosceles triangle with AB = AC and measure of angle ABC = 50°. Then the measure of angle BDC and angle BEC will be



(a) 60°, 100°
(b) 80°, 100°
(c) 50°, 100°
(d) 40°, 120°

Answer: (b) 80°, 100°

Question 8.
The region between chord and either of the arc is called
(a) a sector
(b) a semicircle
(c) a segment
(d) a quarter circle

Answer: (c) a segment

Question 9.
The region between an arc and the two radii joining the centre of the end points of the arc is called a:
(a) Segment
(b) Semi circle
(c) Minor arc
(d) Sector

Answer: (d) Sector

Question 10.
If a line intersects two concentric circles with centre O at A, B, C and D, then:
(a) AB = CD
(b) AB > CD
(c) AB < CD
(d) None of the above

Answer: (a) AB = CD

Question 11.
A chord of a circle which is twice as long as its radius is a ____ of the circle
(a) Diameter
(b) perpendicular
(c) arc
(d) secant

Answer: (a) Diameter

Question 12.
A regular octagon is inscribed in a circle. The angle that each side of the octagon subtends at the centre is
(a) 45°
(b) 75°
(c) 90°
(d) 60°

Answer: (a) 45°

Question 13.
Equal _____ of the congruent circles subtend equal angles at the centers.
(a) Segments
(b) Radii
(c) Arcs
(d) Chords

Answer: (d) Chords

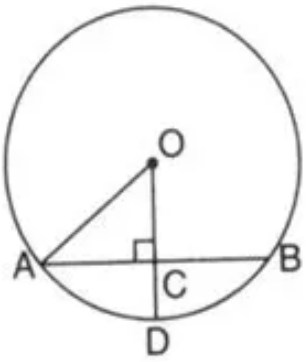
Question 14.
The angle subtended by the diameter of a semi-circle is:
(a) 90
(b) 45
(c) 180
(d) 60

Answer: (c) 180

Question 15.
The degree measure of a semicircle is
(a) 0°
(b) 90°
(c) 360°
(d) 180°

Answer: (d) 180°

Question 16.
In the given figure if OA = 5 cm, AB = 8 cm and OD is perpendicular to AB, then CD is equal to



(a) 4 cm
(b) 3 cm
(c) 5 cm
(d) 2 cm

Answer:

Question 17.
AB is a chord of a circle with radius 'r'. If P is any point on the circle such that ∠APB is a right angle , then AB is equal to
(a) 3r
(b) r
(c) 2r
(d) r^2

Answer: (c) 2r

Question 18.
In a circle with center O and a chord BC, the point D lies on the same side BC as O. If ∠ BOC = 50°,then ∠ BDC =
(a) 25°
(b) 100°
(c) 75°
(d) 150°

Answer: (a) 25°
