Circles

DIRECTION: In the following questions a statement of **ASSERTION (A)** is followed by a statement of **REASON (R).** Choose the correct answers out of the following choices.

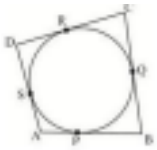
a. Both Assertion (A) and Reason (R) are true and the Reason (R) is the correct explanation of Assertion (A).
b. Both Assertion (A) and Reason (R) are true and the Reason (R) is not the correct explanation of Assertion (A)
c. Assertion (A) is true but Reason (R) is false.
d. Assertion (A) is false but Reason (R) is true.

1. ASSERTION(A): If the radius of a circle is 6cm and the distance of a point outside the circle from its centre is 10 cm, then the external point to the circle is 7cm.

REASON(R) : In a circle, tangents is always perpendicular to its radius at a point of contact.

Answer: (c)

2. Assertion: A quadrilateral ABCD is drawn to circumscribe a circle. If AB=14 cm, BC = 18 cm and CD = 23 cm , then AD= 19cm.



Reason: Opposite sides of a quadrilateral circumscribing a circle subtend supplementary angles at the Centre of the circle.

Answer: (B)

3. Assertion : Distance between two parallel tangents are24 cm, then the radius of the circle is 12cm.

Reason: Distance between two parallel tangents of a circle is equal to the diameter of the circle.

Answer: (a)

4. Assertion: Tangents drawn at the end points of a chord of a circle make equal angles with the chord.

Reason: The common point of the tangent and the circle is called the point of contact.

Answer: (b)