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SECTION – A

This section consists of 20 multiple choice questions of 1 mark each.

1. For a circle with centre O and radius 5 cm, which of the following statements is true ? 1

P : Distance between every pair of parallel tangents is 5 cm.

Q : Distance between every pair of parallel tangents is 10 cm.

R : Distance between every pair of parallel tangents must be between 5 cm and 10 cm.

S : There does not exist a point outside the circle from where length of tangent is 5 cm.

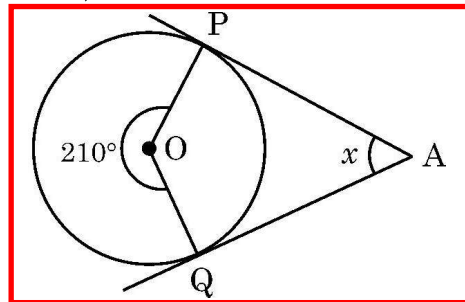
(A) P

(B) Q

(C) R

(D) S

2. In the adjoining figure, AP and AQ are tangents to the circle with centre O. If reflex $\angle POQ = 210^\circ$, the value of $2x$ is 1



(A) 30°

(B) 60°

(C) 120°

(D) 300°

3. If $x = 2 \sin 60^\circ \cos 60^\circ$ and $y = \sin^2 30^\circ - \cos^2 30^\circ$ and $x^2 = ky^2$, the value of k is 1

(A) $\sqrt{3}$

(B) $-\sqrt{3}$

(C) 3

(D) -3

4. A peacock sitting on the top of a tree of height 10 m observes a snake moving on the ground. If the snake is $10\sqrt{3}$ m away from the base of the tree, then angle of depression of the snake from the eye of the peacock is 1

(A) 30°

(B) 45°

(C) 60°

(D) 90°

