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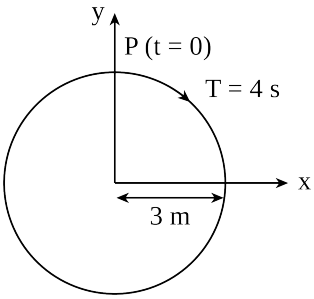
NEET OSCILLATIONS — SHM AND UNIFORM CIRCULAR MOTION — PYQS

Max. Marks: 12 **Questions:** 3

Section A (MCQ) — 3 questions

Q.1 The radius of circle, the period of revolution, initial position and sense of revolution are indicated in the figure.



y- projection of the radius vector of rotating particle P is : [NEET (UG) 2019]

(1) $y(t) = 4\sin\left(\frac{\pi t}{2}\right)$, where y in m

(2) $y(t) = 3\cos\left(\frac{3\pi t}{2}\right)$, where y in m

(3) $y(t) = 3\cos\left(\frac{\pi t}{2}\right)$, where y in m

(4) $y(t) = -3\cos 2\pi t$, where y in m

Scan or tap for the full solution

Q.2 The circular motion of a particle with constant speed is [AIPMT 2005]

(1) periodic but not simple harmonic

(2) simple harmonic but not periodic

(3) periodic and simple harmonic

(4) neither periodic nor simple harmonic

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Q.3 The equations of two waves acting in perpendicular directions are given as $x = a\cos(\omega t + \delta)$ and $y = a\cos(\omega t + \alpha)$, where $\delta = \alpha + \frac{\pi}{2}$, the resultant wave represents

[AIPMT 2000]

(1) a parabola (2) a circle

(3) an ellipse (4) a straight line

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ANSWER KEY

Ques.	1	2	3								
Ans.	3	1	2								