

JEE Main 29 January 2024 Shift 2 Answer Key Physics

Q.1: A rod of length 2m is moving with velocity 2mn/sec along the positive z-axis and B = 2T along the negative side x-axis. What will be the emf induced in the rod? A.1: 8mv

Q.2: What will be the speed of the bob at the lowermost position, if a simple pendulum of length 10 m, the string is initially kept horizontal and the bob is released, and there is a 10% of energy is lost till the bob hit the lowermost position?

A.2: 6 root 5 m/s

Q.3: A planet situated at a distance of r from the sun requires 200 days to orbit the sun once. What would be the orbital period for a planet located at a distance of r/4 from the sun? A.3: 25 days

Q.4: The intensity at each slit is equal for a YDSE and it is maximum I_{max} at central maxima. If I is intensity for phase difference 7pi/2 between two waves at the screen. Then I/I_{max} is ? A.4: 1/2

Q.5: A physical quantity Q depends on the physical quantities a, b and c as $Q = a^4 b^3/c^2$. If the maximum percentage error in the measurement of a, b and c are 3%, 4% and 5% respectively, then find the maximum percentage error in the measurement of Q. A.5: 34%