

AFGJI

CLASS XI
PHYSICS ASSIGNMENT

Q1. State whether in following situations motion of an object is accelerated or retarded-

(i) v +ve, a +ve, (ii) v -ve, a +ve, (iii) v +ve, a -ve, (iv) v -ve, a -ve

Q2. What is the difference between (i) $\Delta x/\Delta t$ and dx/dt , (ii) dx/dt and $d\mathbf{x}/dt$?

Q3. Motion of a particle is given by $x = 6t + 3t^2 - 2t^3$ m. Find its v at $t=0$ s and $t=1$ s. also find its a at $t=1$ s.

Q4. Acceleration of a body is given by $a = 2t + 3t^2$ ms^{-2} . Calculate its velocity. Given that its initial velocity is 5m/s.

Q5. A ball is thrown up by a boy with initial velocity 20m/s. It comes back to him 4s later. Draw the velocity time graph of the motion of the ball.

(Submit the assignment by 7th may Wed.)