#### VIDYA BHAVAN, BALIKA VIDYAPEETH

### SHAKTI UTTHAN ASHRAM, LAKHISARAI, PIN:-811311

**SUBJECT:-** PHYSICS

**CLASS:- IXTH** 

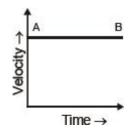
DATE:-18/04/XXI

### SUBJECT TEACHER:- MR. NEEL NIRANJAN

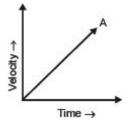
# **CHAPTER 1. (MOTION)(BASED ON NCERT PATTERN)**

# Velocity Time Graphs

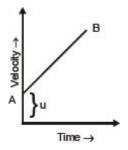
- When a body moving with a uniform velocity.
- The slope of AB indicates zero acceleration



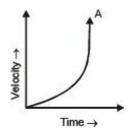
- When a body starts from rest and moves with uniform acceleration.
- Greater is the slope of v-t graph, greater will be the acceleration



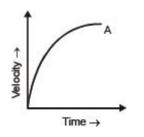
• When a body is moving with uniform acceleration and its initial velocity is not zero.



- When a body is moving with increasing acceleration.
- Slope increases with time.



- When a body is moving with decreasing acceleration.
- Slope decreases with time.



- When a body is moving with a uniform retardation and its initial velocity is not zero.
- As  $\theta > 90^{\circ}$ , graph has a negative slope.

