PHYSICS-XI

SUPER STAR COACHING CENTRE

Date: 3/16/2019

House no 1552/A Ghosia colony Gulbahar No.2, Karachi

Guess paper XI

Prepared by: Mohammad Raza Ansari

SECTION 'C' (DETAILED QUESTION ANSWER)

1) Explain the Young's double slits experiment and derive formula for fringe spacing.
2) What is a simple pendulum. Prove that the motion of simple pendulum is simple harmonic. Derive the expression for its time period.
3) Define projectile motion. Derive the expression for:
   *Maximum height *Time to reach maximum height *Horizontal range
4) Describe Addition of vector by Rectangular component method.
5) Explain Doppler's effect..
6) Derive expression for tension in the string and acceleration of the bodies.(both cases)
7) With the help of ray diagram of a Compound Microscope, describe its working and derive the relevant formula for its magnification.
8) Show that ac = V^2/r
9) Show that:
   - $\vec{A}.\vec{B} = \vec{B}.\vec{A}$
   - $\vec{B}.(\vec{A}+\vec{C}) = \vec{B}.\vec{A} + \vec{B}.\vec{C}$
   - $\vec{A}x\vec{B} \neq \vec{B}x\vec{A}$
10) What is an inclined plane? Derive the expression for the acceleration of body in the:
    *Presence of friction * absence of friction

Prepared by:
Mohmmad Raza Ansari
03452200449