

BOARD OF INTERMEDIATE EDUCATION::A.P::NAMPALLY::HYDERABAD
Revised Syllabus in Physics for II Year Intermediate 2008-09

Topic and Sub - Topics 1	Periods 2	Remarks 3
<u>CHAPTER - 1</u> *		
WAVE MOTION:		
1.1 Longitudinal and transverse waves, Equation for a progressive wave, principle of superposition of waves, reflection of waves.	02	
1.2 Formation of waves on a stretched string, laws of vibrating strings, experimental verification by Sonometer.	02	
1.3 Sound: Characteristics of sound – speed of sound in solids, liquids and gases (only formula to be given), Forced Vibrations – Free Vibrations – Resonance with examples, Standing waves in Organ Pipes - Open Pipes, Closed Pipes, Fundamental frequency, Overtones, harmonics, definition and explanation, Beats definition and their importance.	04	
1.4 Doppler Effect: Definition, derivation of relation for apparent frequency of a sound note emitted by source for the cases a) only source is moving b) only listener is moving c) both source and listener are moving. Applications and limitations of Doppler Effect.	03	
1.5 Echoes, Absorption of sound waves, Reverberation – Reverberation Time - Fundamentals of building Accoustics – Statement of Sabines Law	03	
TOTAL	14	
<u>CHAPTER -2</u> *		
<u>OPTICS:</u>		
2.1 Nature of Light – Newton’s Corpuscular Theory – Huygens’ Wave Theory – Electromagnetic Waves – Electro magnetic spectrum.	01	
2.2 Huygens’ explanation of Reflection and Refraction of plane waves at a plane surface.	02	
2.3 Refraction through prism – Derivation of Refractive index of material of prism for minimum deviation, critical angle, Total Internal Reflection – Relation between Critical Angle and Refractive Index, application of total internal reflection to optical fibers.	04	

