Contents

	Previous	Years'	Solved	Papers
--	----------	--------	--------	--------

Unit 1 : N	Mechanics and Waves	3-96
1.1	Dimensional Analysis	3
1.2	Newton's Laws of Motion and Projectiles	9
1.3	Rotational Dynamics	28
1.4	Gravitation	44
1.5	Flow of Fluids	55
1.6	Theory of Relativity	64
1.7	Oscillations and Waves	72
Unit 2 : 0	Geometrical and Physical Optics	97–151
2.1	Fermat's Principle	97
2.2	Optical Instruments	110
2.3	Huygen's Principle and Interference	122
2.4	Diffraction	131
2.5	Polarisation and Scattering.	137
2.6	Fibre Optics and Laser	145
Unit 3 : 1	Heat and Thermodynamics	152–198
3.1	Heat	152
3.2	Thermodynamics	157
3.3	Kinetic Theory of Gases and Equation of State	170
3.4	Thermodynamic Relations/Potential and Law Temperature	182
3.5	Radiation	190
Unit 4 : 1	Electricity and Magnetism	199–283
4.1	Electrostatics	199
4.2	Direct Current	217
4.3	Magnetism and Magnetic Effect of Currents	232
4.4	Electromagnetic Induction	251
4.5	Alternating Current	257
46	Electromagnetic Wave	274

Unit	t 5 : A	tomic and Nuclear Physics	284–318
;	5.1	Atomic Physics	284
	5.2	Quantum Mechanics	297
:	5.3	Nuclear and Particle Physics.	305
Unit 6 : Electronics			
Unit	t 6 : E l	lectronics	319-353
		lectronics Semiconductor Devices (Diodes and Transistors)	027 000
(6.1		319