

Contents

UNIT 17	Wave Motion	1-46
	Module 1. Wave Equation	2-7
	Module 2. Sine Wave	8-15
	Module 3. Two Graphs in Sine Wave	16-20
	Module 4. Wave Speed	21-27
	Module 5. Energy in Wave Motion	28-30
	Unit Exercise (Cumulative)	31-35
	Hints & Solutions	36-46
UNIT 18	Superposition of Waves	47-96
	Module 1. Resultant Amplitude and Intensity due to Coherent Sources	48-50
	Module 2. Interference	51-53
	Module 3. Standing Wave	54-57
	Module 4. Oscillations of a Stretched Wire (or String)	58-66
	Module 5. Reflection and Transmission of a Wave	67-72
	Unit Exercise (Cumulative)	73-78
	Hints & Solutions	79-96
UNIT 19	Sound Waves	97-173
	Module 1. Displacement, Pressure and Density Waves	98-101
	Module 2. Speed of Longitudinal (or Sound) Wave	102-104
	Module 3. Sound Intensity	105-107
	Module 4. Interference in Sound Wave and Stationary Wave	108-110
	Module 5. Standing Longitudinal Waves in Organ Pipes	111-119
	Module 6. Beats	120-123
	Module 7. The Doppler Effect	124-135
	Unit Exercise (Cumulative)	136-145
	Hints & Solutions	146-173

UNIT 20	Thermometry, Thermal Expansion and Kinetic Theory of Gases	175-254
	Module 1. Thermometers and Temperature Scale	176-178
	Module 2. Thermal Expansion	179-184
	Module 3. Behaviour of Gases	185-195
	Module 4. Degree of Freedom and Internal Energy of an Ideal Gas	196-200
	Module 5. Molar Heat Capacity	201-204
	Module 6. Kinetic Theory of Gases	205-213
	Unit Exercise (Cumulative)	214-223
	Hints & Solutions	224-254

UNIT 21	Laws of Thermodynamics	255-346
	Module 1. The First Law of Thermodynamics	256-257
	Module 2. Further Explanation of Three Terms Used in First Law	257-276
	Module 3. Heat Engine and Refrigerator	277-284
	Module 4. Zeroth and Second Law of Thermodynamics	285-285
	Unit Exercise (Cumulative)	286-304
	Hints & Solutions	305-346

UNIT 22	Calorimetry and Heat Transfer	347-405
	Module 1. Calorimetry	348-353
	Module 2. Heat Transfer	354-371
	Unit Exercise (Cumulative)	372-382
	Hints & Solutions	383-405
