Smart Syllabus / Accelerated Learning Programme (ALP)
Physics Grade-10 for
Academic Session 2026-27 & BISE Exam-2027

Chapter No.	Chapter Name	Topics	Page No.	Exercise
10	Thermal Physics	10.2: Specific heat capacity 10.4: Evaporation 10.6: Superconductivity	7-9 10-12 15,16	MCQs: 10.3, 10.4, 10.5 Short answer question: 10.4 CRQs: 10.2, 10.3 Comprehensive Question: 10.5 Numerical Problems: 10.5, 10.6
11	Transfer of Thermal Energy	11.3: Heat transfer through radiation	25 - 28	MCQs: 11.4, 11.5, 11.7 Short answer questions: 11.1 (Radiation is excluded), 11.6, 11.7 CRQs: 11.1, 11.2, 11.5 Comprehensive Questions: 11.2, 11.4
12	Waves	12.4: Properties of waves 12.5: Seismic and Tsunami waves	39 – 41 41 – 43	MCQs: 12.6, 12.7, 12.8 Short answer question: 12.7 CRQs: 12.1, 12.4, 12.5 Comprehensive Questions: 12.4, 12.5 Numerical Problems: 12.5, 12.6
13	Sound	13.4: Reflection of sound (Echo) Example 13.2 13.5: Refraction and diffraction of sound 13.7: Acoustic protection of buildings	53,54 55 55, 56 59	MCQs: 13.2, 13.6 Short answer questions: 13.2, 13.4 CRQs: 13.3, 13.5, 13.6 Comprehensive Questions: 13.4, 13.5 Numerical Problems: 13.5, 13.6
14	Light	• Refraction through prism • Total internal reflection Example 14.3	69 69 – 72 72, 73	MCQs: 14.2, 14.3, 14.5, 14.6 Short answer question: 14.3 CRQs: 14.2, 14.3, 14.4, 14.5 Comprehensive Questions: 14.2, 14.3, 14.4

Chapter No.	Chapter Name	Topics	Page No.	Exercise
		14.3: Optical fiber 14.5: Optical devices 14.7: Gravitational lens and acoustic lens 14.8: Dispersion of light by prism	73, 74 80, 81 83, 84 84, 85	Numerical Problems: 14.2, 14.5, 14.6
15	Electrostatics	15.3: Applications of electrostatics 15.6: Conduction of electric charges 15.7: Accumulation of charges	93-95 98, 99 99-101	MCQs: 15.1, 15.2, 15.5 Short answer questions: 15.3, 15.4, 15.6, 15.7 CRQs: 15.3, 15.5 Comprehensive Questions: 15.4, 15.5 Numerical Problems: 15.5, 15.7
16	Electricity	16.4: Combination of resistances Example 16.2 16.7: Resistor colour codes 16.8: Common use of electricity 16.10: Household circuits and safety measures	113, 114 114, 115 117-119 119 121-123	MCQs: 16.6 Short answer question: 16.5 CRQs: 16.3, 16.4, 16.5 Comprehensive Question: 16.4 Numerical Problems: 16.2, 16.3
17	Electromagnetism	17.4: Electric motor 17.5: Use of magnetic effects of current	132,133 133-135	MCQs: 17.2, 17.3 Short answer questions: 17.3, 17.5 CRQs: 17.2, 17.3
18	Electromagnetic Induction and Electromagnetic Waves	18.2: A.C. Generator 18.4: Deflection of electron beam in electric and magnetic fields	143, 144 146, 147	MCQs: 18.2, 18.3 Short answer questions: 18.2, 18.3, 18.4 CRQs: 18.3 Comprehensive Questions: 18.3, 18.4, 18.5

Chapter No.	Chapter Name	Topics	Page No.	Exercise
		18.5: Waveform on oscilloscope 18.6: Scattering of light in the atmosphere	147, 148 149	Numerical Problems: 18.2, 18.5
19	Electronics	19.2: Analog and digital electronics 19.3: Boolean logic 19.5: Applications of logic gates	158, 159 159, 160 163, 164	MCQs: 19.5 Short answer questions: 19.5, 19.6, 19.7, 19.8, 19.9 CRQs: 19.3, 19.4, 19.5 Comprehensive Questions: 19.3, 19.6
20	Atomic and Nuclear Physics	20.1: Atomic structure 20.2: Atomic Nucleus Example: 20.1 20.3: Isotopes 20.5: Radioactive decay Example 20.2 20.9: Effects and uses of nuclear radiation	168, 169 169, 170 170 170, 171 173, 174 174, 175 181-183	MCQs: 20.1, 20.2, 20.7, 20.8 Short answer questions: 20.1, 20.2, 20.8 CRQs: 20.1, 20.3, 20.4 Comprehensive Questions: 20.1, 20.3, 20.4 Numerical Problems: 20.1, 20.3, 20.4, 20.7
21	Space and Environment	21.1: Sun and planetary data	187-190	MCQs: 21.1, 21.2, 21.3, 21.5 Short answer questions: 21.1, 21.2, 21.6, 21.7 CRQs: 21.1, 21.2, 21.3 Comprehensive Questions: 21.1, 21.2, 21.3

List of Excluded Practicals of Physics-9 For Academic Session 2026-2027

- Find the value of g by free fall method.
- Investigate the relation between force of limiting friction and normal reaction.
- Find the weight of an unknown object by using principle of moments.
- Find the density of a solid using a measuring cylinder.
- Study the relationship between load and extension (Helical Spring) by drawing a graph.

List of Excluded Practicals of Physics-10 For Academic Session 2026-2027

- Determine the critical angle of glass using a semicircular slab and a light ray box or a laser light.
- Trace the path of a ray of light through a glass prism and measure the angle of deviation.
- Study resistors in a series circuit.
- Study resistors in a parallel circuit.
- Set up a burglar alarm using a NAND gate.
- Make a fire alarm using a NOT gate.
- Find the specific heat of a given solid by the method of mixture using polystyrene cup (as container of negligible heat capacity).
- Draw a graph between temperature and time when ice is converted into water and then to steam by slow heating.