# Smart Syllabus / Accelerated Learning Programme (ALP) Physics (Tech) Grade-9 for Academic Session 2026-27 & BISE Exam-2027

| Chapter No. | Chapter Name | Topics | Page No. | Exercise |
|---|---|---|---|---|
| 1 | Physical Quantities and Measurements | 1.7: Uncertainty in a measurement<br>1.8: Significant Figures<br>1.9: Precision and accuracy | 9<br>9,10<br>10,11 | MCQs: 1.4, 1.5<br>Short answer questions: 1.3, 1.7<br>CRQs: 1.1, 1.3, 1.6<br>Comprehensive Question: 1.4<br>Numerical Problems: 1.4. 1.6 |
| 2 | Kinematics | 2.8: Speed-time graph<br>2.9: Gradient of a speed-time graph<br>2.10: Area under speed-time graph | 25,26<br>26<br>26, 27 | MCQs: 2.5, 2.6, 2.8<br>Short answer questions: 2.4, 2.7, 2.8<br>CRQs: 2.3, 2.4<br>Comprehensive Questions: 2.3 (Speed-time graph is excluded), 2.4<br>Numerical Problems: 2.4, 2.6, 2.7 |
| 3 | Dynamics | 3.2: Forces in a free-body diagram<br>• Terminal Velocity | 34<br>44 | MCQs: 3.3, 3.4, 3.6<br>Short answer questions: 3.2, 3.7, 3.8<br>CRQs: 3.1, 3.3<br>Comprehensive Question: 3.4<br>Numerical Problems: 3.1, 3.5, 3.8 |
| 4 | Turning Effects of Force | 4.1: Like and unlike parallel forces<br>4.7: Centre of Gravity and Centre of mass<br>4.11: Improvement of Stability<br>4.12: Application of stability in real life | 53<br>60, 61<br>66, 67<br>67 - 69 | MCQs: 4.3, 4.4, 4.5<br>Short answer questions: 4.7, 4.8<br>CRQs: 4.2, 4.3, 4.5<br>Comprehensive Questions: 4.2, 4.4<br>Numerical Problems: 4.1, 4.3, 4.7 |

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|---|---|---|---|---|
| 5 | Work, Energy and Power | 5.3: Conservation of energy<br>5.4: Renewable and non-renewable sources<br>5.5: The advantages and disadvantages of methods of energy production | 81,82<br>82,83<br>83 | MCQs: 5.6, 5.7<br>Short answer questions: 5.2, 5.5<br>CRQs: 5.2, 5.3, 5.6<br>Comprehensive Question: 5.2<br>Numerical Problems: 5.5, 5.6 |
| 6 | Mechanical Properties of Matter | 6.7: Measurements of atmospheric pressure<br>6.8: Measurement of pressure by manometer | 97, 98<br>99 | MCQs: 6.1, 6.2, 6.3<br>Short answer questions: 6.7, 6.8<br>CRQs: 6.5, 6.6, 6.8<br>Comprehensive Question: 6.2<br>Numerical Problems: 6.4, 6.5, 6.9 |
| 7 | Thermal Properties of Matter | 7.4: Sensitivity, range and linearity of thermometers | 112, 113 | MCQs: 7.2, 7.7, 7.10<br>Short answer questions: 7.6, 7.9, 7.10, 7.11, 7.14<br>CRQs: 7.3, 7.4, 7.5, 7.7, 7.8, 7.12, 7.13<br>Comprehensive Question: 7.4<br>Numerical Problems: 7.5, 7.6 |
| 8 | Magnetism | 8.8: Applications of magnets in recording technology<br>8.9: Soft iron as magnetic shield | 126,127<br>127,128 | MCQs: 8.6, 8.7, 8.8<br>Short answer questions: 8.5<br>CRQs: 8.3, 8.4, 8.5<br>Comprehensive Question: 8.3 |

**LIST OF EXCLUDED PHYSICS-9 (TECH) PRACTICALS FOR ACADEMICS SESSION 2026-2027**

- Measure the area of cross-section and volume of a solid cylinder by measuring its length and diameter with Vernier Callipers.
- Measure the diameter of a metal ball bearing or a wire by using a micrometer screw gauge.
- Determine the resultant of two forces graphically by using a horizontal force table.
- Find the density of a solid by using a measuring cylinder.