

# PHYSICS

No	Name of Chapter	Focus Area Topics
1.	Physical World	1.2 Scope and Excitement of Physics
2.	Units And Measurement	2.2 The International System Of Units 2.10. Dimensional Analysis and its applications
3.	Motion In A Straight Line	3.2 Position, Path Length And Displacement 3.3 Average Velocity And Average Speed 3.5 Acceleration 3.6 Kinematic Equations For Uniformly Accelerated Motion
4	Motion In A Plane	4.2 Scalars And Vectors 4.10 Projectile Motion
5	Laws Of Motion	5.5 Newton's Second Law Of Motion 5.7 Conservation Of Momentum 5.9.1 Friction 5.10 Circular Motion
6	Work , Energy And Power	6.3 Work 6.4 Kinetic Energy 6.7 The Concept of Potential Energy 6.8 The Conservation of Mechanical Energy 6.11 Power
7	Systems Of Particles And Rotational Motion	7.6 Angular Velocity And Its Relation With Linear Velocity 7.7 Torque And Angular Momentum 7.9 Moment Of Inertia 7.10 Theorems of Perpendicular And Parallel Axes
8	Gravitation	8.3 Universal Law of Gravitation 8.5 Acceleration Due To Gravity of The Earth 8.6 Acceleration Due To Gravity Below And Above The Surface Of Earth
9	Mechanical Properties Of Solids	9.3 Stress And Strain 9.4 Hooke's Law 9.5 Stress Strain Curve
10	Mechanical Properties Of Fluids	10.2.1 Pascal's Law 10.2.4 Hydraulic machines 10.4 Bernoulli's Principle (10.4.1 to 10.4 .4 not necessary)
11	Thermal Properties Of Matter	11.5 Thermal Expansion 11.8 Change Of State
12	Thermodynamics	12.5 First Law Of Thermodynamics 12.8 Thermodynamic Processes 12.9 Heat Engines
13	Kinetic Theory	13.4 Kinetic theory of an ideal gas
14	Oscillations	14.3 Simple Harmonic Motion 14.8.2 The simple pendulum
15	Waves	15.3 Displacement relation in a progressive wave 15.4 The Speed Of A Travelling Wave

# BOTANY

SL. NO.	CHAPTER NAME	FOCUS AREA
1	Chapter 1 BIOLOGICAL CLASSIFICATION	<b>Table 2.1</b> Characteristics of the Five Kingdoms (R.H. Whittaker's Classification) <b>2.3</b> Kingdom Fungi (General characters of Fungi, page 22 and 23) <b>2.6</b> Viruses (page 25 and 26)
2	Chapter 3 PLANT KINGDOM	<b>3.1</b> Algae (General characters of algae, page 30 to 32) and <b>Table 3.1</b> Divisions of Algae and their main characteristics (page 33) <b>3.2</b> Bryophytes (page 34 to 35)
3	Chapter 5 MORPHOLOGY OF FLOWERING PLANTS	<b>5.1</b> The Root <b>5.1.2</b> Modifications of Root <b>5.2</b> The Stem <b>5.2.1</b> Modifications of Stem <b>5.3</b> The Leaf <b>5.4</b> The Inflorescence <b>5.5</b> The Flower <b>5.5.1</b> Parts of a Flower ( <b>5.5.1.1 to 5.5.1.4</b> ) <b>5.9.1</b> Fabaceae (Floral characters and Floral Formula) <b>5.9.3</b> Liliaceae (Floral characters and Floral Formula)
4	Chapter 6 ANATOMY OF FLOWERING PLANTS	<b>6.1.1</b> Meristematic tissues <b>6.1.2.2</b> Complex Tissues <b>6.2.1</b> Epidermal Tissue System <b>6.2.3</b> The Vascular Tissue System <b>6.3.1</b> Dicotyledonous root <b>6.3.2</b> Monocotyledonous root <b>6.3.3</b> Dicotyledonous stem <b>6.3.4</b> Monocotyledonous stem <b>6.3.5</b> Dorsiventral (Dicotyledonous leaf)
5	Chapter 8 CELL : THE UNIT OF LIFE	<b>8.4</b> Prokaryotic cells <b>8.5.1</b> Cell Membrane <b>8.5.4</b> Mitochondria <b>8.5.5</b> Plastids <b>8.5.6</b> Ribosomes <b>8.5.10</b> Nucleus