

BOTANY

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

6	Chapter 10 CELL CYCLE AND CELL DIVISION	10.1.1 Phases of Cell Cycle 10.2 to 10.2.5 – M Phase, Prophase, Metaphase, Anaphase, Telophase, Cytokinesis 10.4 to 10.4.2 – Meiosis, Meiosis I and Meiosis II
7	Chapter 11 TRANSPORT IN PLANTS	11.2.1 Water Potential 11.2.2 Osmosis 11.2.3 Plasmolysis 11.2.4 Imbibition 11.3.1 How do plants absorb water? 11.3.2.2 Transpiration Pull 11.4 Transpiration
8	Chapter 12 MINERAL NUTRITION	12.2.1 Criteria for essentiality of elements 12.6.1 Nitrogen cycle 12.6.2 Biological Nitrogen fixation, Symbiotic biological nitrogen fixation, Nodule Formation.
9	Chapter 13 PHOTOSYNTHESIS IN HIGHER PLANTS	13.3 Where does Photosynthesis take place? 13.4 How many types of Pigments are involved in Photosynthesis? 13.5 What is light reaction? 13.6 The Electron Transport 13.6.1 Splitting of water 13.6.2 Cyclic and Non-cyclic Photo-phosphorylation 13.6.3 Chemiosmotic Hypothesis 13.7.1 The Primary acceptor of CO ₂ 13.7.2 Calvin cycle
10	Chapter 14 RESPIRATION IN PLANTS	14.2 Glycolysis 14.3 Fermentation 14.4 Aerobic respiration 14.4.1 Tricarboxylic Acid Cycle 14.4.2 ETS and Oxidative Phosphorylation
11	Chapter 15 PLANT GROWTH AND DEVELOPMENT	15.4.1 Plant Growth Regulators – Characteristics 15.4.3.1 Auxins 15.4.3.2 Gibberellins 15.4.3.3 Cytokinins 15.4.3.4 Ethylene 15.4.3.5 Abscisic acid 15.5 Photoperiodism