

BOARD OF INTERMEDIATE EDUCATION**ANNUAL ACADEMIC PLAN 2023-24****BOTANY Subject Code: 137 FIRST YEAR**

Month & No,of working Days	Topics to be covered /Unit Test/Exams/Assignment/NEET / EAPCET classes to be conducted	Periods allotted for each topic
JUNE 24	Syllabus dictation and discussion of IPE question paper along with scheme of valuation-weightage of marks to each chapter	01
	UNIT I – DIVERSITY IN THE LIVING WORLD	
	CHAPTER –1: The Living World	
	1.1. What is living?	01
	1.2. Diversity in the Living World	
	1.3. Taxonomic Categories	01
	1.4. Taxonomic Aids	
	CHAPTER – 2: Biological Classification	
	2.1 Kingdom Monera	02
	2.2 Kingdom Protista	02
	2.3 Kingdom Fungi	01
	2.4 Kingdom Plantae	01
	2.5 Kingdom Animalia	
	2.6 Six Kingdom Classification	
	2.7 Viruses, Viroids, Prions and Lichens	01
	CHAPTER – 3: Science of Plants - Botany	
	3.1 Origin	01
	3.2 Development	
	3.3 Scope	
	3.4 Branches of Botany	01
	CHAPTER – 4: Plant Kingdom	
	4.1 Algae	02
	4.2 Bryophytes	02
	4.3 Pteridophytes	02
	4.4 Gymnosperms	01
	4.5 Angiosperms	02
	NEET / EAPCET ASSIGNMENT - 1	02 01 01
	PRACTICALS:	

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	Introduction about practical work, compound microscope, morphology of representative types of bacteria, fungi & different plant groups. Record Work	
JULY 24	UNIT – II : STRUCTURAL ORGANISATION IN PLANTS- MORPHOLOGY CHAPTER – 5: Morphology of Flowering Plants 5.1 The Root – Regions of the root and modifications of root 04 5.2 The Stem – Modifications of stem 03 5.3 The Leaf – Venation, Types, Phyllotaxy and modifications 02 5.4 The Inflorescence 03 5.5 The Flower 03 5.6 The Fruit 02 5.7 The seed 01 NEET / EAPCET 02 UNIT – I 01 FROM 26-07-2023 to 28-07-2023 01 ASSIGNMENT – 2 PRACTICALS: Modifications of Root, Stem, Leaf. Different types of Inflorescence and fruits - Specimens	
AUG 25 (19 P)	UNIT – III : REPRODUCTION IN PLANTS CHAPTER – 6 : Modes of Reproduction 6.1 Reproduction and its types 01 6.2 Asexual reproduction 02 6.3 Sexual reproduction 03 6.4 An over view of angiosperm life cycle 01 CHAPTER – 7 : Sexual Reproduction in Flowering Plants 7.1 Pre-fertilisation structures and events 7.2 Pollination 04 7.3 Pollen- pistil interaction 02 7.4 Double Fertilization 01 7.5 Post fertilization structures and events 01 7.6 Apomixis and polyembryony 01 NEET / EAPCET PRACTICALS: Reproductive parts of a Flower, calculation of percentage of Pollen Germination, Pollen tube growth on Stigma, identification of various stages of female gametophyte development in the ovary of a Flower. 02 UNIT – II FROM 24-08-2023 to 26-08-2023	

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SEP 19	UNIT – IV : PLANT SYSTEMATICS CHAPTER – 8 : Taxonomy of Angiosperms 8.1 Systems, types of classification 02 8.2 Semi-technical description of a flowering plant 02 8.3.1 Fabaceae 02 8.3.2 Solanaceae 02 8.3.3 Liliaceae 02 UNIT – V : CELL – STRUCTURE AND FUNCTIONS CHAPTER – 9 : Cell : The Unit of Life 9.1 What is a cell? 01 9.2 Cell theory 01 9.3 An overview of cell 01 9.4 Prokaryotic Cell 01 9.5 Eukaryotic Cell – Cell membrane and cell wall 02 NEET / EAPCET 02 UNIT TEST - III 01 FROM 16-09-2023 to 20-09-2023 01 ASSIGNMENT – 3 PRACTICALS: Dissecting microscope, plant taxonomy – Fabaceae, Solanaceae and Liliaceae	
OCT 18 (19 P)	CHAPTER – 9 : Cell : The Unit of Life 9.5 Eukaryotic cell - Endoplasmic Reticulum, Golgi apparatus, Lysosomes, Vacuoles, Mitochondria, Plastids, Ribosomes, Cytoskeleton, Cilia and Flagella, Centrosome and Centrioles, Nucleus and Microbodies. 05 CHAPTER – 10 : Bio-molecules 10.1 How to analyse chemical composition? 01 10.2 Primary and secondary metabolites 01 10.3 Biomacromolecules 10.4 Proteins 01 10.5 Polysaccharides 10.6 Nucleic acids 01 10.7 Structure of proteins 01 10.8 Nature of Bond linking Monomers in a Polymer 01 10.9 Dynamic state of body constituents – concept of Metabolism 10.10 Metabolic basis for Living 01 10.11 The Living state CHAPTER – 11: Cell Cycle and Cell Division 01	

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	11.1 Cell cycle 11.2 M - Phase 11.3 Significance of Mitosis 11.4 Meiosis NEET / EAPCET PRACTICALS: Preparation of Study of Mitosis in Onion Root tips, Stages of Meiosis using permanent slides QUARTERLY EXAMINATIONS FROM 11-10-2023 to 18-10-2023	02 02 02
DUSSEHRA HOLIDAYS FROM 19-10-2023 to 25-10-2023		
NOV 25	UNIT – VI: INTERNAL ORGANISATION OF PLANTS CHAPTER –12 : Histology and Anatomy of Flowering Plants 12.1 The tissues 12.2 The tissue systems 12.3 Anatomy of Dicotyledonous and monocotyledonous plants – Root, Stem, Leaf 12.4 Secondary Growth NEET / EAPCET UNIT – IV FROM 23-11-2023 TO 25-11-2023 ASSIGNMENT – 4 PRACTICALS: Tissues and diversity in shapes and sizes of plant cells, anatomy of stems and roots of dicots and Mono cots.	05 03 12 02 02 01 01
DEC 24 (13 P)	UNIT – VII: PLANT ECOLOGY CHAPTER – 13: Ecological Adaptations, Succession and Ecological Services 13.1 Introduction 13.2 Plant communities and Ecological adaptations: Hydrophytes, Mesophytes and Xerophytes 13.3 Plant succession 13.4 Ecological services NEET / EAPCET PRACTICALS: Hydrophytes and Xerophytes specimens	01 05 02 03 02

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HALF-YEARLY EXAMINATIONS FROM 18-12-2023 to 23-12-2023		
JAN 20	SANKRANTHI HOLIDAYS FROM 11-01-2024 to 17-01-2024 PRE-FINAL- I EXAMS. FROM 19-01-2024 to 25-01-2024	
FEB 24	Revision PRACTICAL EXAMINATIONS 2nd WEEK OF FEB 2024 (Tentative)	
MAR 21	I P EXAMINATIONS 1st WEEK OF MARCH 2024 (Tentative) Last Working Day 28-03-2024	
APR & MAY 2024	SUMMER VACATION 29-03-2024 TO 31-05-2024	