TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION: HYDERABAD

ANNUAL ACADEMIC PLAN 2024-2025

BOTAN	Y I Y	/EAR
Month/ No. of working days & Periods	Topics to be covered/Unit – Test / Exams / EAPCET/NEET classes to be conducted	Periods allotted for each topic
June 23	Syllabus dictation and discussion of IPE Question paper along with scheme of valuation- weightage of marks to each chapter. Unit-I DIVERSITY IN THE LIVING WORLD CHAPTER-I	01
	THE LIVING WORLD 1.1 What is living ? 1.2 Diversity in the living world 1.3 Taxonomic categories 1.4 Taxonomic aids.	01 01 01 01
	CHAPTER-2 BIOLOGICAL CLSASSIFICATION 2.1 Kingdom Monera, 2.2 Kingdom Protista, 2.3 Kingdom Fungi	02 02 03
	 2.4 Kingdom Plantae 2.5 Kingdom Animalia. 2.6 Six kingdom classification 2.7 Viruses, Viroids, Prions and Lichens. CHAPTER-3 	01 02
	SCIENCE OF PLANTS – BOTANY 3.1 Origin 3.2 Development 3.3 Scope of Botany	01 01
	3.4 Branches of Botany Unit Test - I EAPCET/NEET	01 01 04
July 24	CHAPTER-4 PLANT KINGDOM 4.1 Algae 4.2 Bryophytes 4.3 Pteridophytes 4.4 Gymnosperms 4.5 Angiosperms	02 02 02 02 02 02

	4.6 Plant Life cycles and Alternation of Generations	01
	UNIT – II	
	STRUCTURAL ORGANISATION IN PLANTS.	
	MORPHOLOGY	
	CHAPTER-5 MORPHOLOGY OF FLOWERING OF	
	FLOWERING PLANTS	
	5.1 The root	02
	5.2 The stem	02
	5.3 The leaf	02
	PRACTICALS :	
	#Practical syllabus dictation	02
	#Q.P.Model	
	#1.Study of the parts of compound microscope	01
	Unit Test - II	01 04
Aug	EAPCET/NEET 5.4 The inflorescence	03
24	5.5 The Flower	03
	5.6 The Fruit	03
	5.7 The Seed	01
	UNIT-III	
	REPRODUCTION IN PLANTS	
	CHAPTER- 6	
	MODES OF REPRODUCTION	
	6.1Reproduction and its types	03
	6.2 Asexual reproduction	05
	6.3 Sexual reproduction	03
	6.4 An overview of angiosperm life cycle	01
	PRACTICALS :	
	#2.Identification and study of the Morphology of	02
	representative types of Bacteria, Fungi & different plant groups.	
	Unit Test - III	01
	EAPCET/NEET	01
SEPT	CHAPTER-7	
22	SEXUAL REPRODUCTION IN FLOWERING	
	PLANTS	
	7.1Pre fertilization structures and events.	03
	7.2 Pollination	02
	7.3 Pollen pistil interaction	01
	7.4 Double fertilization	02 01
	7.5 Post fertilization structures and events	01
	7.6 Apomixis, Parthenocarpy and polyembryony	01

	UNIT- IV PLANT SYSTEMATICS	
	CHAPTER-8	
	TAXONOMY OF ANGIOSPERMS	
	8.1 Systems, types of classification	0.1
	8.2 Semi-technical description of a typical flowering	01
	plant	02
	8.3 1.Fabaceae	
	PRACTICALS :	02
		02
	#3.Study of modifications of Root	
	#4.Study of modifications of Stem	
	#5.Study of modifications of Leaf	
	#6.Study and identification of different types of	
	Inflorescence	
	Unit Test - IV	01
	EAPCET/NEET	04
ОСТ	8.3.2 Solanaceae	02
19		02
19	8.3.3 Liliaceae	02
	FIRST TERM HOLIDAYS FROM	
	06-10-2024 TO 13-10-2024	
	UNIT-V CELL : STRUCTURE AND FUNCIONS	
	Chapter-9	
	CELL: THE UNIT OF LIFE	
	9.1 What is a cell	
	9.2 Cell theory	01
	9.3 An over view of Cell	01
		01
	9.4 Prokaryotic cell	01
	9.5 Eukaryotic cell	01
	9.5.1cell membrane,	01
	9.5.2 cell wall	01
	9.5.3 Endomembrane system	01
	9.5.4 Mitochondria,	01
	9.5.5 Plastids	01
	9.5.6 Ribosomes	01
	9.5.7 Cytoskeleton	01
	PRACTICALS :	01
	#7.Study of the reproductive parts of commonly available	
	flowers	
	#8.Calculation of % of pollen germination	02
		02
	#9.Study of pollen tube growth on stigma	
	#10.Study and identification of various stages of Female	
	gametophyte development in the ovary of a flower.	
	#11.Study and describing flowering plants of family	
	Fabaceae	0.1
	Unit Test – V	01
	EAPCET/NEET	04

NOV	9.5.8 Cilia and Flagella	
24	9.5.9 Centrosome and centrioles	01
	9.5.10 Nucleus	02
	9.5.11 Microbodies (Peroxysomes and glyoxysomes)	01
	CHAPTER- 10 :	
	BIOMOLECULES.	
	10.1 How to analyse chemical composition	01
	10.2 Primary and secondary metabolities,	01
	10.3 Bio-macromolecules	01
	10.4 Proteins	01
	10.5 Polysaccharides	01
	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	01
	10.10 Metabolic basis for living	
	10.11 The living state	
	HALF YEARLY EXAMS 18-11-2024 TO 23-11-2024 PRACTICALS:	
	#12.Study and describing flowering plants of family	02
	Solanaceae	02
	#13.Study and describing flowering plants of family	
	Liliaceae	
	EAPCET/NEET	04
DEC	CHAPTER 11	
23	CELL CYCLE AND CELL DIVISION	
	11.1 Cell cycle	01
	11.2 M.phase	01
	11.3 Significance of Mitosis	02
	11.4 Meiosis	02
	11.5 Significance of Meiosis	02
	UNIT-VI	
	INTERNAL ORGANISATION OF PLANTS	
	CHAPRER-12	
	HISTOLOGY AND ANATOMY OF FLOWERING	
	PLANTS	0.2
	12.1 The tissues	03
	12.2 The tissue systems	02
	12.3.1 Anatomy of Dicotyledonous Root	02
	12.3.2 Anatomy of Monocotyledonous Root	01
	12.3.3 Anatomy of Dicotyledonous Stem	02
	12.3.4 Anatomy of Monocotyledonous Stem	01

	PRACTICALS :	
	#14.Preparation of Herbarium sheets of flowering plants	
	#15.Study of tissues and diversity in shapes and sizes of	02
	plant cells	
	#16. Study of anatomy of root of dicots	
	#17. Study of anatomy of root of monocots	
	Unit Test – VI	01
	EAPCET/NEET	04
JAN	12.3.5 Anatomy of Dicotyledonous Leaf	01
22	12.3.6 Anatomy of Monocotyledonous Leaf	01
	12.4. Secondary Growth	01
	UNIT-VII – PLANT ECOLOGY	
	CHAPTER – 13 ECOLOGICAL ADAPTATIONS,	
	SUCCESSION & ECOLOGICAL SERVICES	
	13.1 Introduction	0.1
	13.2.1 Hydrophytes	01
	13.2.2 Ecological adaptations in Hydrophytes	02
	13.2.3 Mesophytes	-
	13.2.4 Xerophytes	01
	13.2.5 Ecological adaptations in Xerophytes	01
	13.3 Plant Succession	01
	13.4 Ecological Services/Ecosystem services	01
	PRACTICALS :	
	#18. Study of anatomy of Stem of dicots	
	#19. Study of anatomy of Stem of monocots	02
	#20. Preparation and study of mitosis in onion root	
	tips (To be demonstrated by teacher)	
	#21. Study of stages of meiosis using permanent	
	slides	0.4
	EAPCET/NEET	04
	SANKRANTI HOLIDAYS	
	11-01-2025 To 16-01-2025	
	(SECOND TERM HOLIDAYS)	
	PRE-FINAL EXAMINATIONS	06
	20-01-2025 To 25-01-2025	
FEB 23	REVESION	23
MAR 23	INTERMEDIATE PUBLIC EXAMINATIONS (THEORY) 1 ST WEEK OF MARCH LAST WORKING DAY 29-03-2025	23

Prepared by **T. SRINIVAS RAO** JL IN BOTANY GOVERNMENT JUNIOR COLLEGE IBRAHIMPATNAM, RANGA REDDY DIST