TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION: HYDERABAD

ANNUAL ACADAMIC PLAN 2023-24

ZOOLOGY SECOND YEAR

ZOOLOGY		COND YEAR
Month & No. of Working days/ No. of periods	Test/Exams/Assignments/EAMCET/NEET Classes to be conducted	Periods allotted for each topic.
June	Syllabus Dictation & Q.P model Explanation	01
24	UNIT-I: HUMANANATOMYANDPHYSIOLOGY	
	IA. Digestion and Absorption	
	1.11. Digestive system-Alimentary canal and digestive glands;	02
	1.1.3 Digestive process (physiology of digestion), peristalsis, absorption of digested food	02
	1.1.6 Gastro Intestional hormones, disorders of digestive system	02
	IB. Breathing and Exchange of gases	
	1.2.1. Respiratory organs	01
	1.2.2. HumanRespiratorySystem	01
	1.2.3. Mechanismofbreathing,	01
	1.2.4 Respiratory volumes and capacities, Exchange of gases	01
	1.2.6 Transport of gases	01
	1.2.7 Regulation of respiratory movements.	01
	EAMCET AND NEET	02
	ASSIGNMENT - 1	01
JULY 23	1.2.8. Disorders of the Respiratory system.	01
23	UNIT II A	0.1
	BODY FLUIDS AND CIRCULATION	01
	2.1 Lymphatic System2.2 Clotting of blood Circulating pathways	01 02
	2.2 Clotting of blood Circulating pathways2.3 Human cardio-vascular system	02
	2.4 Cardiac cycle, double circulation; Regulation of cardiac activity	02
	2.5 Blood vessels, disorders of circulatory system: Hypertension, coronary artery disease(CAD),angina pectoris, heart failure	02
	EAMCET/NEET	01

	IIB.	Excretory products and their Elimination:	
	2.6	Modes of excretion-Ammonotelism, Ureotelism,	01
		Uricotelism, Excretory organs	
	2.7	Human excretory system-structure of kidney and	02
		nephron;	
	2.8	Urineformation, osmoregulation, Regulation of kidney	03
		function-Renin-Angiotensin-Aldosterone system,	
		Atrial Natriuretic Factor, ADH and diabetes in sipidus	
	2.9	Role of other organs in excretion	01
	2.10	Disorders: Uraemia, renalfailure, renal calculi,	01
		nephritis, Glomerul on ephritis, dialysis using artificial	
		kidney	
		UNIT TEST -1	01
		EAMCET/NEET	02
	Pract	tical: Specimen Study	02
AUGUST	UNIT	· · · · · · · · · · · · · · · · · · ·	
25		ANANATOMYANDPHYSIOLOGY-III	
	IIIA.	Musculo-Skeletal system:	
	3.1.1	Types of moment ,The muscle- structure of muscle	02
		ultra structure of skeletal muscle fibre, Contract	0.5
		ileproteins	02
	3.1.2	, ,	02
	3.2	Coricycle, types of Muscle Fibers The skeleton	02
	3.2	3.2.1Axial skeleton	02
		3.2.2 Appendicular skeleton	
		3.3.1Joints,Structureofsynovialjoints	02
	3.2.4	Disorders of the muscular and skeletal system:	02
		myasthenia gravis, tetany, muscular dystrophy,	
		arthritis, osteoporosis, gout	0.0
		EAMCET/NEET	02
		Neural control and Co-ordination:	02
	3.5	Human NeuralSystem-Central nervous system,	02
		Peripheral nervous system, somatic nervous system and autonomic neural system	
	3.6	Generation and conduction of nerve impulse and	01
	3.0	synaptic Transmission	
	3.7	Reflex action and Reflex Arc.	02
	3.8	Sensory reception and processing; Sense organs The	01
		Eye, mechanism vision, The Ear and mechanism of	
		hearing, disorders of human neural system Disorders	
		· · · · · · · · · · · · · · · · · · ·	
		of Human Neural system- Alzheimer's disease (AD), Meningitis, Parkinson's Diseases, Strokeor Cerebro- VascularAccident(CVA	

	UnitTest-II	01
	EAMCET/NEET	02
	Practical's: Specimens, types of Joints/Slides	02
SEPTEMBER	UNIT-IV:	
22	HUMANANATOMYANDPHYSIOLOGY	
	IVA. Endocrine system and Chemical co-ordination:	
	4.1 Endocrine glands and hormones: Human endocrine	04
	system-Hypothalamus, pituitary, Pineal, Thyroid,	04
	Parathyroid, Thymus, Adrenal, Pancreas, Gonads,	
	Hormones of Kidney, Heart and gastro intestinal tract	
	and Liver	
	4.2 Mechanism of hormone action (Elementary idea only);	02
	Role of hormones as messengers and regulators	02
	EAMCET/NEET	02
	4.3 Human hormonal disorders due to Hypo and hyper	03
	secretions: Dwarfism, acromegaly, Gigantism,	02
	cretinism, goiter, exophthalamicgoiter, myxedema,	02
	tetany, diabetes mellitus, diabetes insipidus, insulin	02
	shock Adison's disease, Cushing's syndrome	
	UNIT TEST III	01
	EAMCET/NEET Practical's: SPECIMENS	02
		02
OCTORER	FIRST TERM HOLIDAYS 19-10-2023 TO 25-10-2023	
OCTOBER 18	IVB. Immune System:	0.4
10	4.4 Basic concepts of immunology- Types of cells of the	01
	immune system, organs of immune system	0.4
	4.5 Types of Immunity-Innate Immunity, Acquired	01
	Immunity, Active and Passive Immunity, Humoral	
	immunity, Cell mediated immunity	
	4.6 Vaccination or Immunization	01
	4.7 Immunological Disorders-HIV and AIDS, Hyper	01
	sensitivity disorders, Auto immune disorders, Graft	
	Rejections	
	EAMCET/NEET	01
	UNIT-V	
	HUMANREPRODUCTION	
	VA. Human Reproductive System:	
	5.1 The Male Reproductive system	01
	5.2 The Female Reproductive System	01
	5.3 Gameto genesis-Spermatogenesis & Oogenesis	02
	5.4 Menstrual Cycle	01

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	01
	0.4
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	02
sexually transmitted diseases (STD)	
Birthcontrol-Need and methods, contraception, barrier	01
methods, intra urine devices ,oral contraceptive pills,	
surgical methods and medical termination of	
pregnancy (MTP)	
5.13 Amniocentesis: in fertility and Assisted Reproductive	01
Technology (ART)-IVF-ET, ZIFT, GIFT, ICSI, AI,	
Surrogacy	
EAMCET/NEET	01
Practical: Display the Charts	01
UNIT-VI:GENETICS	
6.1 Heredity and variation: Morgan's experiment, With	01
reference to Drosophila (Drosophila melanogaster Grey,	01
Black body color; Long Vestigial Wings)	
6.2 Pleiotropy Co-dominance (Blood groups as example)	01
6.3 Multiplealleles: Inheritance of blood groups and ABO'	01
Blood types, Rh-Blood types, genetic control of Rh	01
system, Erythro blastiosis foetalis	
6.4 Polygenic Inheritance	01
6.5 Sex determination-Heterpgametic sex determination	01
Male heterogamety, female heterogamety Sex	01
determination in humans Genic balance theory, Barr	01
bodies, Haplodiploidy in honey bees	
6.6 Sex – Linked inheritance–Sex linkage in Drosophila,	01
Sex linked inheritance - in Human beings -	01
Haemophilia, colorblindness mendeli and isordersin	
humans - Thalassemia, Haemophilia, Sickle celled	01
anaemia, cystiefibrosis PKU, Alkaptonuria. Y linked	
inheritance, XY Linked inheritance	
6.7 Genetic disorders–Down's sysdrome, Turner's	01
Syndrome and Klinefelter syndrome	
	sexually transmitted diseases (STD) Birthcontrol-Need and methods, contraception, barrier methods, intra urine devices ,oral contraceptive pills, surgical methods and medical termination of pregnancy (MTP) 5.13 Amniocentesis: in fertility and Assisted Reproductive Technology (ART)-IVF-ET, ZIFT, GIFT, ICSI, AI, Surrogacy EAMCET/NEET Practical: Display the Charts UNIT-VI:GENETICS 6.1 Heredity and variation: Morgan's experiment, With reference to Drosophila (Drosophila melanogaster Grey, Black body color; Long Vestigial Wings) 6.2 Pleiotropy Co-dominance (Blood groups as example) 6.3 Multiplealleles: Inheritance of blood groups and ABO' Blood types, Rh-Blood types, genetic control of Rh system, Erythro blastiosis foetalis 6.4 Polygenic Inheritance 6.5 Sex determination-Heterpgametic sex determination Male heterogamety, female heterogamety Sex determination in humans Genic balance theory, Barr bodies, Haplodiploidy in honey bees 6.6 Sex – Linked inheritance—Sex linkage in Drosophila, Sex linked inheritance – in Human beings – Haemophilia, colorblindness mendeli and isordersin humans - Thalassemia, Haemophilia, Sickle celled anaemia, cystiefibrosis PKU, Alkaptonuria. Y linked inheritance, XY Linked inheritance 6.7 Genetic disorders—Down's sysdrome, Turner's

	6.9 DNA Finger Printing – protocol Application of DNA	01			
	fingerprinting				
	EAMCET/NEET	02			
	Practical's :Bio-Chemistry	01			
	Physiological Experiments				
	HALF YEARLY EXAMS – 20-11-2023 TO 25-11-2023				
DECEMBER	UNITVII: ORGANIC EVOLUTION				
23	7.1 Origin of life	02			
	7.2 Biological evolution	02			
	7.3 Evidences for biological evolution	03			
	(palaeontological, comparative anatomical,				
	embryological and molecular evidences)				
	7.4 Theories of evolution: Lamarckism (in brief), Darwin's	03			
	Theory of Evolution-Natural Selection with example –				
	industrial melanism, mutation theory				
	7.5 Modern Synthetic theory of Evolution- or Neo	02			
	Darwinism				
	7.6 Mechanism of evolution Hardy-Weinberg Eqilibrium;	02			
	II Evolutionary forces	02			
	Types of Natural Selection; Geneflow, Genetic load,				
	genetic drift				
	III Speciation				
	Anagenesis, cladogenesis Allopatric specitation,				
	Sympatric speciation }	02			
	7.7 A brief account of evolution				
	7.8 Origin and evolution of man				
	UNITTEST-IV	01			
	EAMCET/NEET	02			
	Practical: Biochemistry/Physiology Experiments	02			
JANUARY	UNIT-VIII:APPLIED BIOLOGY				
23	8.1 Animal husbandry, Dairy farm management	02			
	8.2 Poultry farm management	02			
	8.3 Bee-Keeping	02			
	8.4 Fishery Management	02			
	8.5 Bio technological Applications in medicine	01			
	8.6 Vaccines	01			
	8.7 Molecular Diagnosis	01			
	8.8 Gene Therapy	01			
	8.9 Transgenic Animals	01			
	8.10 Cancer Biology	01			

	8.11 Stem cells	01	
	8.12 Biomedical Technology	03	
SANKRANTHI HOLIDAYS – 13-01-2024 to 16-01-2024			
PRE-FINALEXAMINATIONS-I FROM 22-01-2024 to 29-01-2024			
FEBRUARY	Revision Pre-Final-II		
24	PRACTICAL EXAMINATION IPE 2024	24	
	(2nd WEEK OF FEBRUARY)	2.	
MARCH	Theory Examinations IPE 2024		
22	(1st WEEK OF MARCH)		
	Last working Day 31-03-2024		

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