

Lesson Plan for Postgraduate course in Zoology for the period July 2015- June 2016,

Dr Srikanta Guria, Assistant Professor

Academic Quarter	Class	Name of the Teacher	Topics to be covered	No. Of Lectures	Tests
July 15 to September 15	PG Sem I	Dr Srikanta Guria	PAPER 3 BGCZ-03TH Cell and Tissue [mitochondria, Golgi bodies, lysosomes, endoplasmic reticulum, structure & function of cytoskeleton and its role in motility, Apoptosis and Necrosis. Cell signaling: Hormones and their receptors, cell surface receptor,	10(Th)	Continuous evaluation tests for Sem I and Sem III Final Exams. For Sem II and Sem IV
	PG Sem II				
	PG Sem III		Paper 11 Module - BGCZ-15TH Classification and biology of Bacteria, Cells and Molecules involved in innate and adaptive immunity, Antigen processing, presentation, B & T cell Cooperation, Inflammation & Hypersensitivity Module – BGCZ-20PR PRACTICAL, PAPER 15B Cyto & Molecular Genetics, Meiotic chromosome study of Grasshopper	12(Th) 3 (Pract)	
	PG Sem IV				
September '15 to December '15	PG Sem I		PAPER 3 BGCZ-03TH - Signaling through G-protein coupled receptors, signal transduction pathways (RTK and JAK-STAT pathways), second messengers, regulation of signaling pathways, bacterial and plant two-component signaling systems, bacterial chemotaxis and quorum sensing]. PAPER -5C Practical (Module – BGCZ-07PR) Microtomy, sectioning and staining	11(Th) 5 (Pract)	Continuous evaluation tests for Sem I and Sem III
	PG Sem II				
	PG Sem III		Paper 12 Module - BGCZ-16TH , Human Genetics – Genetic Disorder, Genetic Counselling Mutation- in vitro & site directed Mutagenesis, sequencing- Basics, Transgenesis BGCZ-18TH Elective Paper: Parasitology and Immunology Hypersensitivity, epidemiology of malaria Module – BGCZ-19PR, PRACTICAL: paper 15, PAPER 15A, Slide Agglutination Tests	10 (Th) 3 (Pract)	
	PG Sem IV				

January '16 To March'16	PG Sem I				Final Examinations for Sem I and Sem III
	PG Sem II		Pr: ELISA BGCZ-08TH Chordate – Structure and Function Nervous system – evolution of cerebrum and its functional complexities, CNS and information processing Paper 7:: BGCZ 09 TH Developmental Biology ,Genetic control of development: early development in model systems – Caenorhabditis elegans (Nematodes); Axis formation in Drosophila, chick and mouse.Metamorphosis (Hormonal control in Amphibia	10 (Th)	Continuous evaluation tests for Sem II and Sem IV
	PG Sem III				
	PG Sem IV		Paper 18 Module - BGCZ-24TH Neurobiology and Endocrinology Molecular conformation and ion-channels of neuronal membrane., Origin of nerve impulse. Propagation of impulse in myelinated and non-myelinated nerve fibres.,Ultrastructure of synapse.,Excitatory and inhibitory neurotransmitters	7 (Th)	
April'16 To June'16	PG Sem II		BGCZ 10TH Animal Physiology & Behaviour Endocrinology and reproduction: Endocrine glands, basic mechanism of hormone action, hormones and diseases; reproductive processes, neuroendocrine regulation. Module – BGCZ-13PR PRACTICAL Histological Staining: PAS, Staining & Identification: Bursa of Fabricius, Spleen, Thymus, Tonsil, Adenoid, Stomach, Intestine, Tongue, Lungs, Uterus	9(Th) 4 (Pract)	Continuous evaluation tests for Sem II and Sem IV
	PG Sem III				
	PG Sem IV		Paper 18 Module - BGCZ-24TH Neurobiology and Endocrinology Synaptic transmission of impulse.True structure and neuromuscular junction and neuromuscular transmission.. Hormone receptor, Baro- and chemoreceptor Paper 19 Module - BGCZ-25TH (Elective Paper) Immune response during bacterial, Autoimmune and Cancer Immunology Module – BGCZ-27PR PRACTICAL, PAPER 20B: Elective Paper Agglutination & Precipitation Tests	10 (Th) 2 (Pract)	

