

SARDAR PATEL UNIVERSITY
Programme: BSC (ZOOLOGY)
Semester: III
Syllabus with effect from: June 2012

Paper Code: US03EZOO01	Total Credit: 3
Title Of Paper: Invertebrate, Physiology, Biotechnology & Parasitology	

Unit	Description in detail	Weighting (%)
1	Type Study of Nereis Liverfluke	
2	Circulation: Circulatory media, Types of Ciculatory system, Types of heart, Structure and working of human heart, structure of blood vessels, Anticogulants. Blood groups - 'ABO' system, Rh factor, Blood transfusion, lymph & lymphatic system.	
3	Endocrinology: Hormones - Introduction, Classification of hormone, mechanism of action (lipid and water soluble hormone) Structural features and hormonal secretions of Pituitary gland Thyroid gland Adrenal gland Parathyroid gland	
4	Biotechnology & Parasitology Labo.fascilities for tissue culture, types of culture media for cells & tissue, culture procedure, Transgenic animals, forensic medicine. Parasitology : Structure, pathogenecity, prevention and control of following parasites. Protozoa : Balantidium coli, Trypanosoma gambiense Helminthes : Ancylostoma, pin-worm, Diseases : AIDS, STD, Coronary heart diseases.	

Basic Text & Reference Books:

- Invertebrate zoology: R.L. Kotpal
- Invertebrate zoology: H.C.Nigam
- Invertebrate zoology: Jordan & Verma
- Animal Physiology: A.K.Berry
- Animal Physiology: Verma, Tyagi, Agarwal
- Elements of Biotechnology : P.K.Gupta
- Economic Zoology: Sukla & Upadhyay
- Medical parasitology: Dey and Dey

