

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

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|--------------------------------------------------|------------------------|
| <b>Paper Code:</b> US03CZOO02                    | <b>Total Credit: 3</b> |
| <b>Title Of Paper:</b> Physiology and Adaptation |                        |

| Unit     | Description in detail                                                                                                                                                                                                                                                                                            | Weighting (%) |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>1</b> | <b>CIRCULATION</b><br>Circulatory media, Types of Circulatory system.<br>Formation of Blood Cells<br>Coagulation of Blood AND Types of anti Coagulants.<br>Types of Heart. Structure and Working Mechanism of Human Heart. Cardiac cycle and ECG.<br>Blood Group ABO System, RH Factor and Blood.<br>Transfusion |               |
| <b>2</b> | <b>HUMAN RESPIRATORY SYSTEM.</b><br>Respiratory Organs.<br>Pulmonary Ventilation.<br>Lung Volumes and capacity<br>Transport of gases<br>Regulation of Respiration<br>Disorders of Respiratory system.                                                                                                            |               |
| <b>3</b> | <b>DISEASES</b><br>AIDS, STD, (Gonorrhoea, Syphilis, Genital Herpes)<br>Coronary Heart Diseases: Bypass, B.P, Atherosclerosis, Anemia<br>Parasitology: E. Histolytica, Balantidium coli, Trypanosoma.<br>Hook Worm (Ancylostoma), Pin Worm (Oxyuris), Trichinella spiralis,<br>Dracunculus, Schistosoma.         |               |
| <b>4</b> | <b>ADAPTATION</b><br>Terrestrial: Desert, Burrowing, Cursorial, Arboreal, Volant<br>Aquatic: Fresh Water, Marine Water.<br>Special: Mimicry, Camouflage, Echolocation, Electric Organ.                                                                                                                           |               |

**Basic Text & Reference Books:**

- A Text Book of animal Physiology by A K BERRY.
- Animal Physiology by M. P. ARORA.
- Principles of anatomy and Physiology by TORTORA GRABOWSKI.
- Zoology for IAS by SATGURU PRASAD.
- Animal Ecology by M.P. ARORA.
- Medical Parasitology by RAJESH KARYAKARTE, AJIT DAMLE.
- Economic Zoology by SHUKLA AND UPADHYAY.

