

SARDAR PATEL UNIVERSITY
Programme: B.Sc
Semester: I
Syllabus with effect from: June-2011

Paper Code: US01EBIO01	Total Credit: 2
Title of Paper: Biology	

Unit	Description in Detail	Weightage (%)
I	Animal Cell & Tissue Prokaryotic and Eukaryotic cell Animal cell - Structure and composition Outline Classification of Animal tissues Importance of Vitamins and Minerals, Deficiency diseases	25%
II	Economic zoology and adaptation Economically important insects Environmental adaptations- Aquatic, Aerial, Desert, Burrowing, Arboreal And Mimicry Poisonous and non poisonous snakes	25%
III	Plant cell- structure of prokaryotic and eukaryotic cell Plant tissue- structure and functions of: Meristematic tissue (Apical and lateral tissue) Permanent tissue simple tissue-parenchyma, collenchyma, sclerenchyma, Complex tissue- Xylem and phloem Plant morphology Annuals, perennials, herbs, shrubs, trees, climbers Leaf: Parts of leaf. leaf base, petiole, leaf lamina. Type of leaf: Simple, Compound Phyllotaxy: Alternate, Opposite and Whorled Inflorescence: Racemose, Cymose Flower: Calyx, corolla, Androecium, Gynoecium	25%
IV	Economic Importance of Plants (Brief description of plant and uses) Cereals: Wheat, Rice Pulses: Chickpea, Pigeon pea Plant Fibers: Cotton, Jute Timber: Teak, sal Vegetables - Tomato, Potato, Brinjal , Onion Spices - Clove, Cinnamon Oil yielding plants - Groundnut, Sunflower Medicinal Plants - Tulsi, Neem	25%

Basic Text & Reference Books:

- Invertebrate Zoology - Jordan and Verma
- Economics Zoology - Shukla and Upadhyay
- Handbook of Economics Zoology - Jawaid Ahsan, Subhash Prasad Smha
- Vertebrate Zoology - Jordan and Verma
- Evolution - Verma, Rastogi and Agrawal
- Invertebrate zoology - R.L.Kotpal



- Vertebrate zoology - R.L.Kotpal
- Human anatomy and physiology- Tortora and Grabowsky
- Cell biology, genetics, molecular biology, evolution and ecology, P.S. Verma and V.k.Aggrawal
- Books of Indian Birds - Salim Ali
- N.S.Subramanyam - Modern Plant Taxonomy
- O. P. Sharma - Plant Taxonomy
- B. P. Pandey - Taxonomy of Angiosperms.
- P. C. Vashishta - Taxonomy of Angiosperms.
- Y. D. Tyagi & S. Kshetrapal - An Intoduction to Taxonomy of Angiosperms.
- Hill - Economic Botany.
- P. L. Kochar - Economic Botany
- M. Daniel- A Phytochemical Approach to Economic Botany

