

**SARDAR PATEL UNIVERSITY**  
**Programme: B.Sc (Home Science)**  
**Semester: I**  
**Syllabus with effect from: June-2011**

**Contents:**

Plant body: Life processes, economic importance, cell and tissue.

Animal cell and tissue, useful and harmful organisms, Micro-organisms, Genetics, Health and diseases.

## Theory

<b>Paper Code: UH01CBIO03</b>	<b>Total Credit: 2</b>
<b>Title Of Paper: Biology</b>	

Unit	Description in detail	Weighting (%)
I	Biological Science: Introduction, major branches of Biology, its significance. Elementary study of plant and animal cell. Composition of protoplasm. Brief study of cell division. Study of plant and animal tissues.	25%
II	Form, structure and functions of vegetative and reproductive parts of seed bearing plants. Study of unisexual and bisexual flowers. Elementary study of pollination, fertilization and reproduction in plants. Plant metabolism: Transpiration, Photosynthesis and respiration.	25%
III	Heredity and variations. Sex determination in man and multiple birth. General Health care and common diseases in human. Economic importance of plants and animals.	25%
IV	<b>Transport of materials in living systems;</b> Diffusion Exchange of substances between cells and their environment. Intracellular exchange of substances. Water and food transport <b>Brief account of Virus, Bacteria and yeast, Commercial importance of Microbes.</b>	25%

### Basic Text & Reference Books

- Dutta A.C.,(1980) ‘ A class book of Botany’ John Brown, oxford university press. Faraday House, Calcutta- 13.
- Apsangikar D.K. and Rane K.T.(1975): ‘Introduction to Botany’: Popular Publication Surat.
- Sharma V.K. (1990) ‘Biology class XI’ Publishers 23, Daryaganj New Delhi-110002.
- Sankaram M.S.(1990) ‘Biology for Class XII’ Tata McGraw-Hill Publishing Company Limited 4/12 Asaf Ali Road New Delhi.
- Gujarat State Board of school Text books (1994) ‘Biology Standard 12’: old assembly Building Sector 17, Gandhinagar.
- Gujarat State Board of school Text books (1996) ‘Biology Standard 12’: old assembly Building Sector 17, Gandhinagar.
- Maheshwari P.Manoharlal (1996) ‘Biology Part 1-7’ NCERT New Delhi.

