SARDAR PATEL UNIVERSITY

Programme: BSC (BOTANY)

Semester: III

Syllabus with effect from: June 2012

| Paper Code: US03EBTN01 | Total Credit: 2 |
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| Title Of Paper: Fundamentals of Botany | Total Credit: 2 |

| Unit | Description in detail | Weighting (%) |
|------|---|---------------|
| 1 | Phycology and Mycology | |
| | Classification ,distribution, morphology and life cycle of : Chara ,Vaucheria | |
| | Economic and industrial importance of algae. | |
| | Classification, distribution, morphology and life history of: Alternaria, | |
| | Puccinia | |
| | Economic importance of fungi | |
| 2 | Bryophytes and Pteridophytes | |
| | Classification, morphology, anatomy and reproduction of: Marchantia, | |
| | Polytrichum and Selaginella. | |
| | Types and evolution of stele in Pteridophytes. | |
| 3 | Gymnosperms and Angiosperms | |
| | Distribution, morphology, anatomy and reproduction of Pinus. | |
| | General Characters, Example and Economic importance of Labiateae, Rubiaceae. | |
| | Myrtaceae. | |
| | Secondary growth in Dicot stem and root. | |
| 4 | Economic Botany: (Brief note on economically important plants) | |
| | Plants for food- Cereals, rice and wheat; Pulses- Gram and Mung. | |
| | Fibers- Cotton, Jute; Oil- Mustard and Ground nut; Beverages: Tea and Coffee; | |
| | Timber Yielding- Teak and Sal. | |

Basic Text & Reference Books:

- ➤ College Botany Vol 2 : Gangulee and Kar
- ➤ College Botany Vol.1, 2, 3, B. P. Pandey.
- > Text Book of Algae, B. R. Vasistha.
- > Text Book of Fungi, B. R. Vasistha.
- > Text Book of Bryophyta, B. R. Vasistha.
- Text Book of Pteridophyta, B. R. Vasistha; N. S. Parihar.
- > Text Book of Gymnosperms. P.C. Vasistha.
- ➤ College Botany Vol 3: Sushil Kumar Mukherjee, New Central Book Agency. Calcutta.
- Economic Botany O. P. Sharma.
- Angisperms, Embryology and economic Botany: Singh, Pandey and Jain.

