

SEMESTER 1st to 3rd
MULTIDISCIPLINARY COURSES
BOT022I BOTANY - INTRODUCTORY BOTANY

(CREDITS: 03)

Objective: To impart understanding to students about general characteristics of major plant groups, morphology & function of various plant organs and economic importance of plants.

UNIT I: INTRODUCTION TO PLANTS AND BOTANY

Concept to understand plants; origin and evolution of plants; history of plant classification; general characteristics of major plant groups-bacteria, algae, fungi, bryophyte, pteridophyta, gymnosperms and angiosperms.

UNIT II: PLANT STRUCTURE AND FUNCTION

Morphology, function and types of roots, stem and leaves (brief overview); flower structure; reproduction in plants (asexual and sexual); fruit structure and types; seed structure and dispersal

UNIT-III: PLANTS AND HUMAN WELFARE

Economic importance of plants; brief overview of plants used as food(cereals, pulses, vegetables, mushrooms); as fruits (apple, pear, plum, peach, apricot, almond, cherry, walnut); as spices (saffron, black cumin, coriander, mint); as timber (fir, kail, deodar, poplar, willow) ;as medicine (hand, kuth, tethwan, kralmund, sochal).

BOOKS RECOMMENDED

1. Introductory Botany: An introduction to Plant biology-James D. Mauseth-Jones & Bartbelt Publishers- London.
2. Economic Botany: S. L Kochar 5th edition Cambridge University Press.
3. Text book of Economic Botany- V Verma, Anne Books Pvt Ltd New Delhi.
4. Economic Botany: Albert F Hill Surjeet Publications.
5. Economic Botany- Principles and Practice. Gerald E. Wickens-Springer International Edition.
6. Raven Biology of Plants-8th edition. Susan E. Eichorn & Ray Evert-Macmillan Sciences USA.