

Devi Ahilya Vishwavidyalaya Indore (M.P.)

Department of Higher Education, Govt. of M.P.

Post Graduate Semester wise Syllabus

As recommended and Approved by Board of Studies D.A.V.V.

उच्च शिक्षा विभाग, म.प्र. शासन

स्नातकोत्तर कक्षाओं के लिये सेमेस्टर अनुसार पाठ्यक्रम

अध्ययन मण्डल देवी अहिल्या विश्वविद्यालय द्वारा अनुशंसित तथा अनुमोदित

Session (सत्र)

2019-20

M. Sc. Botany (Semester System)

Second Semester

Course PG 201:

Taxonomy of Angiosperms

85+15

- UNIT I: **Principle and methods of Taxonomy:** Taxonomic hierarchy, species, genus, family and other categories, principle used in assessing relationship, delimitation of taxa and attribution of rank. Silent features of International Code of Botanical nomenclature. Taxonomic Tools- Herbarium, Floras, Botanical Gardens.
- UNIT II: **Taxonomic evidence and Phylogeny:** Anatomy, palynology, embryology, cytology, phytochemistry, genome analysis and nucleic acid hybridization in relation to taxonomy, different approaches and views of origin and evolution of Angiosperm.
- UNIT III: **Systems of Angiosperm classifications:** Phenetic versus phylogenetic systems, Bentham and Hooker's classification, Takhtajan's classification, APG system of classification, merits and demerits of above classifications.
- UNIT IV: **Taxonomic studies:** Magnoliaceae, Annonaceae, Papaveraceae, Capparidaceae, Caryophyllaceae, Meliaceae, Rosaceae, Myrtaceae, Cucurbitaceae and Cactaceae.
- UNIT V: **Taxonomic studies:** Rubiaceae, Asteraceae, Apocynaceae, Convolvulaceae, Acanthaceae, Verbenaceae, Orchidaceae, Zingiberaceae, Musaceae and Arecaceae.

Suggested Readings

1. Heywood and Moore, D.M; 1984: CWTent concept in Plant Taxonomy Academic Press.
2. Banson, L.B.; 1957: Plant Classification, Health and Co. Boston.
3. Davis, P.R and Heywood, V.H 1973: Principles of Angiosperms and Taxonomy, Robert E.
4. Kreiger Pub. Co. New York, USA
5. Eames, A.I.; 1961: Morphology of Angiosperms, Mc-Graw Hill, New York.
6. Jeffery, C.; 1968: An Introduction to Plant Taxonomy J. and H. Churchill Limited.
7. Lawrence, G .H.M.; 1951: Taxonomy of Vascular Plants Macmillan, New York.
8. Naik V. N.; 1984: Taxonomy of Angiosperms. Tata Mc-Graw Hill Pub. Co. Ltd. New Delhi.
9. Porter, L.L.; 1959: Taxonomy of Flowering Plants. San Francisco. Radfor~ A. E. Dickinson, W.C. Massey J.R and. Ben. C.R: 1974: VQ-llar Plant SYstematics, Harper and Row, New York