

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
COIMBATORE - 641 029
B.Sc., BOTANY
Curriculum & Scheme of Examination under CBCS (APPLICABLE TO STUDENTS
ADMITTED FROM THE ACADEMIC YEAR (2016-2017)

Semester	Part	Subject code	Title of the Paper	Hours / Instruction	Exam. Marks			Duration of Exam.(hour)	Credit
					CIA	ESE	Total		
I	I	16TML101	Part-I -Lang -Tamil-I /Hindi-I /French -I / Malayalam – I / Sanskrit - I	6	25	75	100	3	3
	II	15ENG101	Part – II - English - I	6	25	75	100	3	3
	III	16UBO101	C.P.1- Biodiversity-I (Bacteria, Virus, Algae, Fungi, Lichens & Plant Pathology)	7	25	75	100	3	4
		15UZO1A1	Allied -1 Zoology – I	5	20	55	75	3	4
			C.Pr.1 - Plant Diversity – I	2	-	-	-	-	-
			Allied Pr. Zoology – 1	2	-	-	-	-	-
	IV	15EVS101	Environmental studies**	2	-	50	50	3	2
II	I	15TML202	Part – I- Tamil-II /Hindi-II /French-II / Malayalam-II / Sanskrit - II	6	25	75	100	3	3
	II	15ENG202	Part- II- English - II	6	25	75	100	3	3
	III	16UBO202	C.P.2- Plant Diversity-II (Bryophytes, Pteridophytes, Gymnosperms & Paleobotany)	7	25	75	100	3	4
		15UZO2A2	Allied - 2 Zoology - 2	5	20	55	75	3	4
		16UBO2CL	C.Pr.1 - Biodiversity – 1 & II	2	40	60	100	3	2
		16UZO2AL	Allied. Pr. Zoology	2	20	30	50	3	2
	IV	15VED201	Value Education - Moral and Ethics**	2	-	50	50	3	2
III	I	15TML303	Part-I-Tamil-III /Hindi- III / French- III / Malayalam – III / Sanskrit - III	6	25	75	100	3	3
	II	15ENG303	Part – II -Lang – English - III	6	25	75	100	3	3

	III	15UBO303	C.P. 3 - Anatomy and Embryology of Angiosperms.	5	25	75	100	3	4
		15UCH3A3	Allied – 3 – Chemistry - 1	5	20	55	75	3	4
			C. Pr. 2 - Anatomy and Embryology of Angiosperms	2	-	-	-	-	-
			Allied – Pr. – Chemistry	2	-	-	-	-	-
	IV	15UGA3S1	Skill based subject –I General awareness	2	25	75	100	3	3
IV		16TBT301/ 16TAT301/ 16UHR3N1	Basic Tamil* / Advanced Tamil**/ Non Major Elective – Human Rights**	2	-	75	75	3	2
	I	16TML404	Part-I-Tamil-IV / Hindi-IV / French - IV/ Malayalam – IV / Sanskrit - IV	6	25	75	100	3	3
	II	16ENG404	Part— II -Lang – English IV	6	25	75	100	3	3
	III III	15UBO404	C.P.4- Biostatistics and Biophysics	5	25	75	100	3	4
		15UCH4A4	Allied 4 – Chemistry - 2	5	20	55	75	3	4
		15UBO4C M	C. Pr. 2 – Anatomy & Embryology / Biostatistics & Biophysics	2	40	60	100	3	2
		15UCH4A L	Allied Pr. Chemistry.	2	20	30	50	3	2
	IV	15UBO4S2	Skill based subject-II Plant Tissue culture concept and applications	2	25	75	100	3	3
		16TBT401/ 16TAT402 16UWR4N 2	Basic Tamil*/ Advanced Tamil**/ Non Major Elective – Women Rights**	2	-	75	75	3	2
V	III	16UBO505	C.P. 5 – Fundamentals of Computer and Bioinformatics	4	25	75	100	3	4
		15UBO506	C.P. 6 - Taxonomy of Angiosperms & Economic Botany	5	25	75	100	3	5
		15UBO507	C.P.7 - Cytology, Genetics and Plant Breeding.	4	25	75	100	3	5
		16UBO508	C.P. 8 - Plant Ecology, Phytogeography and Resource Conservation	4	25	75	100	3	5
		16UBO5E1	Elective – I	3	25	75	100	3	5
		15UBO5C N	C.Pr.3 – Fundamentals of Computer and Bioinformatics	4	40	60	100	3	2

			C.Pr. 4 - Taxonomy of Angiosperms, Economic Botany, Cytology, Genetics and Plant Breeding, Plant Ecology, Plant Geography and Resource Conservation	4	-	-	-	-	-
	IV	16UZO/UBC/UBT5X1	EDC – Extra Departmental course	2	25	75	100	3	3
		15UBO5IT	Internship Training	Grade*****					
VI	III	15UBO609	C.P.9 - Horticulture	5	25	75	100	3	5
		16UBO610	C.P.10- Biochemistry	5	25	75	100	3	5
		15UBO611	C.P.11- Plant Physiology	5	25	75	100	3	5
		15UBO6CO	C.Pr. 4 - Taxonomy of Angiosperms, Economic Botany, Cytology, Genetics and Plant Breeding, Plant Ecology, Plant Geography and Resource Conservation		40	60	100	3	2
		16UBO6CP	C. Pr. 5 – Horticulture, Biochemistry and Plant physiology	4	40	60	100	3	2
		16UBO6E2	Elective- II	5	25	75	100	3	5
		15UBO6Z1	Project***	4	20	80	100	-	5
		15UBO6S4	Skill based Subject-IV- Cultivation and Marketing of Medicinal plants	2	25	75	100	3	3
		15NCC/NS S/YRC/PYE101	Extension activity *	-	50	-	50	-	1

C.P.6. - TAXONOMY OF ANGIOSPERMS AND ECONOMIC BOTANY

Objectives

- To analyze the classification and description of flowering plants.
- To study about the cultivation and economic uses of Paddy, Cotton and Sugarcane.

UNIT I (15 HOURS)

Aims and objectives of taxonomy. Systems of classification – Natural (Bentham and Hooker), Phylogenetic (Engler & Prantl) and Modern (Takhtajan). Merits and Demerits –Guidelines to the identification of plant specimen.

UNIT II (15 HOURS)

Herbarium techniques and uses, National herbarium- CNH - Regional herbarium – MH. Botanical Survey of India. Nomenclature - Binomial, ICBN- principles. Typication, Author citation, Effective and valid publication. Rejection of names.

UNIT III (15 HOURS)

Detailed study of the following families with reference to the Morphology, Taxonomy and their economic importance. Annonaceae, Sterculiaceae, Rutaceae, Anacardiaceae, Caesalpiniaceae, Mimosaceae, Myrtaceae, Curcubitaceae, Apiaceae, Rubiaceae, Asteraceae, Sapotaceae and Apocynaceae.

UNIT IV (15 HOURS)

Asclepiadaceae, Solanaceae, Acanthaceae, Verbenaceae, Lamiaceae, Amaranthaceae, Euphorbiaceae, Orchidaceae, Zingiberaceae, Liliaceae, Arecaceae and Poaceae.

UNIT V (15 HOURS)

Economic Botany- study of botany, cultivation and utilization of the following with reference to Tamil Nadu. Fiber yielding plant (cotton), sugar yielding plant (sugarcane) and food crops – (Cereals - Paddy and Pulses - Soyabean). Spices and condiments (chillies and turmeric).

TEXTBOOKS

1. Sharma, O.P. 1986. Modern taxonomy. Rastogi Publications, New Delhi.
2. Subramanyam, N.S. 1987. Modern Plant Taxonomy, Vikas Publishing House, New Delhi.
3. Sambamoorthy A.V and N.S. Subramanyam. 1989. A text book of Economic Botany. Wilay Easters, New Delhi.
4. Verma, V. 2006. A textbook of Economic Botany. Emky Publication, New Delhi.

REFERENCES

1. Singh, V. and D.K. Jain. 1997. Taxonomy of Angiosperms. Rastogi Publications, New Delhi.
2. Pandey, B.P.1997. Taxonomy of Angiosperms. Chand & Co., New Delhi.
3. Jain, S.K. and R.R. Rao. 1977. A. Handbook of Field and Herbarium methods. Today and Tomorrow Publishers, New Delhi.
4. Henry, A.N. and Chandrabose. 1982. An aid to the international code of botanical nomenclature. BSI Calcutta.