CERTIFICATE COURSE 2022-2023 YEAR

Name of Course: Practical Application of Plant Taxonomy Code: BOT08PT

Objective: To identify the unknown species which are economically important, based on its characteristics and by comparing with already existing species.

Outcome: By the end of the course, students are expected to

- 1. Understand the basic principles of plant taxonomy.
- 2. Understand the various basic principles behind the plant propagation
- 3. Realize the importance of plant taxonomy

Eligibity: 1st semester UG students of the college

Syllabus: Practical Application of Plant Taxonomy

Module-1

Systematic and importance of systematics, Systems of classification: Artificial– Linnaeus; Natural– Bentham and Hooker.(5 hours)

Module-11

Study (systematic position, distribution, common members, diagnostic features, description from habit to fruit and economic importance) of the following families. Annonaceae, Malvaceae, Meliaceae, Rutaceae, Fabaceae with sub families, Myrtaceae, Cucurbitaceae, Rubiaceae, Asteraceae, Apocynaceae, Asclepiadaceae, Solanaceae, Acanthaceae, Lamiaceae, Euphorbiaceae, Liliaceae, Orchidaceae and Poaceae. (15 hours)

Module-111

Contributions of eminent Taxonomists viz William Roxburgh, and EK Janaki Ammal (4hours).

Module-1V

Plant Nomenclature – Limitations of common name, ICN, Herbarium preparation and maintenance, Botanic Gardens: RBG, Kew; JNTBGRI (6 hours)

Visit to Botanical garden, JNTBGRI is recommended References:

- 1. Gurucharan Singh, (2019) Plant Systematics An Integrated Approach, 4th edition. CRC Press. Florida.
- 2. Jeffrey, C. (1968) An introduction to Plant Taxonomy, Cambridge University Press, London.
- 3. Mondal A.K. (2009) Advanced Plant Taxonomy, New Central Book agency Pvt. Ltd.

Kolkata.

4. Nicholas J. Turland *e al.* (2018) International Code of Nomenclature for algae, fungi, and plants- Shenzhen Code (printed/ electronic version) Koeltz Botanical Books. Distribution of internal and external mark.