

SEMESTER-IV

Max. Marks – 40+10*

Time- 3 Hrs.

PAPER –I BIOLOGY AND DIVERSITY OF SEED PLANTS-II

Note: Attempt five questions in all, selecting two questions from each unit.

Question No. 1 is compulsory (short answer type).

Nine questions are to be set spread over the entire syllabus. All questions carry equal marks.

UNIT-I

Taxonomy and Systematics, fundamental components of taxonomy (identification, classification, description, nomenclature and phylogeny).

Role of chemotaxonomy, cytotaxonomy and taxometrics in relation to taxonomy. Botanical

Nomenclature, principles and rules, principle of priority.

Type concept, taxonomic ranks.

Keys to identification of plants.

Flower and Types of Inflorescence.

UNIT-II

Salient features of the systems of classification of angiosperms proposed by Bentham & Hooker and Engler & Prantl.

Diversity of Flowering Plants: Diagnostic features and economic importance of the following families: Ranunculaceae, Brassicaceae, Malvaceae, Euphorbiaceae, Rutaceae, Leguminosae, Apiaceae, Asclepiadaceae, Lamiaceae, Solanaceae, Asteraceae, Liliaceae and Poaceae.