

Class : B.Sc. II
 Subject : BOTANY
 Periods per week : Th. _____
 Weeks (Total) : 15

Semester III
 Paper No: VII
 Pr. _____

Week	Topic to be covered
1	Salient features of angiosperms. Practicals:- Study of family Annonaceae
2	Bentham and Hooker's system of classification. Practicals:- Study of family Malvaceae
3	Merits and demerits of Bentham and Hooker's system of classification. Practicals:- Study of family Ceasalpinaceae.
4	Relation of taxanomy with embryology. Practicals:- Study of family Fabaceae.
5	Relation of taxanomy with ecology and cytology. Practicals:- Study of family Mimoceae.
6	Relation of taxanomy with palynology.. Practicals:- Study of family Solanaceae.
7	Binomial nomenclature.. Practicals:- Study of family Acanthaceae.
8	Botanical gardens and Herbaria. Practicals:- Study of family Apocynaceae.
9	Study of family Annonaceae and Malvaceae. Practicals:- Study of family Apocynaceae
10	Study of family Ceaslpinaceae and Mimocaceae. Practicals:- Study of family Labiatae.
11	Study of family Apocynaceae and Solanaceae. Practicals:- Study of family Nyctaginaceae.
12	Study of family Acanthaceae and Lamaceae. Practicals:- Study of family Lilliaceae.
13	Study of family Nyctaginaceae and Lilliaceae. Practicals:- Study of family Poaceae.
14	Study of family Poaceae. Practicals:- Excursion to Botanical garden, observation and collection of herbarium specimen
15	Revision of syllabus and question paper pattern. Practicals:- Preparation of excursion report , field note book and herbarium.

Dr. Rafiuddin Naser.

Class: B.Sc. II Year

Semester: III

Subject: BOTANY

Paper No: VIII (Plant Ecology)

Periods per week: Theory

Weeks (Total): 15.

WEEKS	TOPICS TO BE COVERED
1	Plant and Environment- Climatic factor- light as ecological factor, global radiation, Photoperiodism, short day and long day plant.
2	Temperature as ecological factor, Plant distribution, Thermoperiodism, Vernalization, Water- forms of water.
3	Physical and Chemical Properties of Water, Hydrological cycle, Edaphic factors, development of soil etc.
4	Soil profile, Types of Soil (Major) Black, Lawry, sandy, etc. Properties of Soil- Physical.
5	Chemical properties of Soil, Soil Erosion, Soil Conservation.
6	Response of plants to water- adaptation in plants with reference to availability of water.
7	Hydrophytes: Different types, Submerged, floating, free, Pistia, Eichornia, Hydrilla, Typha, and root stem.
8	Xerophytes: Types, Ephenerals, succulent and non-succulent, Aloe, Casurina, Nerium, Anatomical and physiological adaptation.
9	Halophytes: Anatomical and physiological adaptation in Rhizophora. Epiphytes: Anatomical and physiological adaptation in Vanda
10	Biogeographical region of India- Vegetative types, grassland vegetation, forest vegetation.
11	Community ecology- study of community, Characteristics of community- Analytical characters – Frequency.
12	Density, Synthetic Characters life form and Biological spectrum
13	Ecological studies- Ecosystem- structure of ecosystem, Biotic and Abiotic components, Food Chains- Grazing and Detritus.
14	Food Web- Ecological Pyramids, Energy flow.
15	Biogeochemical Cycle- Nitrogen and Phosphorous Cycle

Dr. S.M. Quazi.