

2. Dissertation may be offered by regular students only in lieu of one paper of Final Year Examination as prescribed in the syllabus of the subject concerned. Only such candidates will be permitted to offer dissertation who have secured atleast 50% marks in the aggregate at the previous examination.

Note: Dissertation shall be type-written and shall be submitted in triplicate, so as to reach the Controller of Examinations atleast two weeks before the commencement of Examination.

3. There shall be atleast eight theory in Post-Graduate Examination, 4 in Previous and 4 in Final year examinations of 100 marks each unless and otherwise prescribed. The non-credit papers wherever prescribed will remain as such. The marks of these non-credit papers will not be counted for division but passing in the same is compulsory.
4. Each theory paper will be of three hours duration.
5. Wherever practicals are prescribed the scheme will be included in the syllabus.
6. A candidate who has completed a regular course of study for one academic year and Passed M.A. / M.Sc. / M.Com. Previous Examination of the university shall be admitted to the Final Year Examination for the degree of Master of Arts / Master Of Science / Master of Commerce provided

that he / she has passed in atleast 50% of the papers at the previous examination by obtaining atleast 36% marks in each such paper.

- (a) For reckoning 50% of the papers at the previous examination, practical will be included and one practical will be counted as one paper.
 - (b) Where the number of papers prescribed at the previous examination is an odd number it shall be increased by one for the purpose of reckoning 50% of the paper.
 - (c) Where a candidate fails for want of securing minimum aggregate marks but secured 36% marks in atleast 50% of the papers, he/she will be exempted from re-appearing in those papers in which he/she has secured 36% marks.
 - (d) Where the candidate secures requisite minimum percentage in the aggregate of all the papers but fails for want of the requisite minimum percentage of marks prescribed for each individuals paper he/she shall be exempted from re-appearing in such paper (s) in which he / she has secured atleast 25% marks.
7. A candidate who has declared fail at the Final Year Examination for the degree of Master of Science / Arts, Commerce shall be exempted from re-appearing in a subsequent year in the following papers :

- (a) Where a candidate fails for want of securing the minimum percentage in the aggregate marks, he/she shall be exempted from re-appearing in such paper (s) Practical (s). Dissertation in which he/she has secured atleast 36% marks; provided he/she is passing in atleast 55% of the papers. (Here passing in each paper requires 36% marks).
- (b) Where a candidate secures the minimum requisite including dissertation wherever prescribed but fails for want of minimum percentage of marks prescribed for in each individual paper / dissertation, he / she shall be exempted from reappearing in such paper (s) dissertation in which he/she has secured atleast 25% marks provided he/she is passing in atleast 50% of the paper (here passing in each paper requires 25% marks)

M.Sc. (PREVIOUS) BOTANY

PAPER -I BIOLOGY AND DIVERSITY OF MICROBES, ALGAE AND FUNGI

UNIT-I

Algae in diversified habitats (terrestrial, freshwater and marine), thallus organisation, cell structure, reproduction, criterion for classification of algae, major systems of classification.

- a. Salient features and general account of following classes :
- i. Prochlorophyceae
 - ii. Chlorophyceae
 - iii. Charophyceae
 - iv. Xanthophyceae
 - v. Bacillariophyceae
 - vi. Chrysophyceae

UNIT-II

- vii. Phaeophyceae
 - viii. Rhodophyceae
- b. A brief account of Prasinophyceae, Glaucophyceae, Eustigmatophyceae, Haptophyceae
- c. Economic importance of algae

UNIT-III

Mycology : General characters of fungi; substrate relationship in fungi; cell ultrastructure; unicellular

and multicellular organization; cell wall composition; nutrition (saprobic, biotrophic and symbiotic) reproduction (vegetative, asexual, sexual); heterothallism; heterokaryosis; parasexuality; recent trends in classification. Phylogeny of fungi; general account of Mastigomycotina, Zygomycotina, Ascomycotina, Basidiomycotina and Deuteromycotina; Mycorrhizae and Lichens.

UNIT-IV

Microbiology : Fungi in industry, medicine and food; Archaeobacteria eubacteria and cyanobacteria : general account; ultrastructure, nutrition and reproduction; biology and economic importance; general account of Prions, Rickettsias, L-forms, Viroids etc. Viruses : Characteristics and ultrastructure of virions; isolation and purification of viruses; chemical nature, replication, transmission of viruses; economic importance.

Mycoplasma and Phytoplasma : General characteristics and role in causing plant diseases.

UNIT-V

Phytopathology : Scope and brief history of plant pathology, concept of disease and a general account of diseases caused by various plant pathogens. Important symptoms of plant diseases. Mechanism of host penetration and defense. A general account of physiological specialization, toxins and phytoalexins. Molecular basis of host-parasite interaction. Plant diseases management and fungi as biocontrol agents.

M.Sc. (PREVIOUS) BOTANY

PAPER-II

BIOLOGY AND DIVERSITY OF BRYOPHYTES, PTERIDOPHYTES AND GYMNOSPERMS

UNIT-I

General characters and classification :

Structure, reproduction, interrelationships of Bryophytes with special reference to:

1. Sphaerocarpaceae : *Sphaerocarpos*
2. Marchantiales : *Marchantia, Asterella*
3. Jungermanniales : *Pellia*
4. Calobryales : *Calobryum*
5. Anthocerotales : *Anthoceros* complex,
Notothylas
6. Sphagnales : *Sphagnum*
7. Bryales : *Polytrichum*

UNIT-II

A systematic study of the distribution (present and past with special reference to India), structure, reproduction, evolution and inter-relationships of the Pteridophyta with special reference to :

1. Psilophytopsida : Psilophytales - general account