

Examination B.Sc. Semester – II  
Botany (Non-CBCS)

Time allowed: 3 hrs

M. Marks – 80

Section A consists of one compulsory question of 10 parts, each carrying 2 marks. The questions will be short answer type having answers not exceeding 20 words.

SECTION – A

- a) What is amber?
- b) What are Petrification fossils?
- c) What is transfusion tissue?
- d) What is polyembryony?
- e) Difference between holotype and neotype?
- f) What are monographs?
- g) What is chemotaxonomy ?
- h) What is numerical taxonomy ?
- i) What is Gynobasic style?
- J) What is Capitulum ?

Section-B consists of long answer type questions of 12 marks each, two from each unit. The candidates are required to answer one question from each unit.

Section-B

Q. 1 What is fossilization? Describe various processes of fossilization and factors affecting them.

OR

Write short notes on

- a) General account of Bennettiales
- b) Structure of flower of Cycadeoidea
- c) Fossil angiosperms

Q2. With the help of suitable diagrams describe the structure of the coralloid root of cycas and how would you distinguish it from the normal roots.

OR

Write short notes on

- a) Structure of ovuliferous scale of Pinus
- b) Manoxylic and Pycnoxylic wood
- c) Male cone of Ephedra

Q3. Define species? Explain the process of speciation

OR

Write explanatory notes on the following

- a) Taxonomic keys
- b) Binomial nomenclature

Q4. Give an account of Bentham and Hooker's system of classification. Discuss the merits and demerits of the system.

OR

What is the contribution of embryological and cytological studies in taxonomy? Give suitable examples.  
Q5. Give an account of distinguishing features of family Euphorbiaceae. Draw floral diagrams of a typical cyathium of Euphorbia.

OR

Give an account of family Poaceae. Also give floral formula and floral diagram of the family.