

Roll No.

Total Pages : 3

MDQ/D-23

5225

**PLANT TAXONOMY AND
ECONOMIC BOTANY**

Paper–BOT–302

Time Allowed : 3 Hours]

[Maximum Marks : 80

Note : Attempt **five** questions in all, selecting **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Define/explain the following :

- (a) Holotype. (b) Cereals.
(c) Taxonomic hierarchy.
(d) Phylogenetic system of classification.
(e) Systematics. (f) Gums.
(g) Valid Publication. (h) Antioxidant.

UNIT-I

2. Write explanatory notes on the following :

- (a) Species : concept and types.
(b) Botanical survey of India : its organization and role.

3. What are Taxonomic evidences? Discuss the role of anatomy or palynology in solving Taxonomic problems. Support your answer with suitable examples.

UNIT-II

4. What is International Code of Nomenclature? Describe its salient features.
5. Give an outline of Engler and Prantl's system of classification of angiosperms and discuss merits and demerits.

UNIT-III

6. Explain the concept of centre of Origin of crop plants. Describe the centres of Origin of crop plants suggested by N. I. Vavilov and major crops of each centre.
7. Write explanatory notes on any **two** of the following :
(a) Origin of Bread wheat.
(b) Difference between *Indica* and *Japonica* rice varieties.
(c) Morphology and Cultivation of Groundnut.

UNIT-IV

8. (i) What are Spices? Write botanical name, family, morphology of part used and uses of :
(a) Clove (b) Kesar
(c) Asafoetida (d) Chillies.

- (ii) Define tannins. Describe any 4 major commercial sources of tannins and their uses.
9. (i) Write botanical name, family, morphology of part used and medicinal properties of :
- (a) Quinine (b) Isabgol
(c) Sarp Gandha (d) Amla.
- (ii) Write botanical name, family of any four important sources of commercial timber and describe their characteristic features and uses.