

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.