

Botany (Theory) (Paper-II)

Attempt FIVE Questions in all. Section-A is Compulsory. Select FOUR Questions from Section-B.

SECTION-A

1- Briefly answer the following questions:

7

- i) Define the term Taxonomy.
- ii) What are the characteristics of Root?
- iii) What is the need of Classification?
- iv) Family Cruciferae is also called _____.
- v) Distinguish between Raceme and Spike Inflorescence.
- vi) What are Lenticels?
- vii) Writ the botanical names of Turnip and Brinjal.

SECTION-B

2- a) Differentiate between:

2,2

- i) Sucking roots and mycorrhizal roots.
- ii) Parenchyma and sclerenchyma
- b) Describe the importance of Family Rosaceae.

3½

3- a) What are Tap Roots? Describe modification of Tap Roots.

1,3½

- b) Write the differences between Vessels and Sieve Tubes.

3

4- a) What is Racemose Inflorescence? Describe its different types giving suitable examples.

4

- b) Name the three layers of Cell Wall. State the characteristics of each layer.

3½

5- a) Write merits of Bentham and Hooker's system of classification.

3½

- b) Describe Collenchyma under the following heads:

4

- i) Location
- ii) Origin
- iii) Structural Characteristics
- iv) Functions

6- a) What are Meristems? Classify the meristems according to Position.

4

- b) Write the economic importance of Family Solanaceae.

3½

7- a) What is Secondary Growth? Explain the process of Secondary Growth in a Dicot Stem.

4

- b) What are Succulent Fruits? Describe the various types of succulent fruits.

3½

8- a) Describe the development of Female Gametophyte in Angiosperms.

3½

- b) What are Stipules? Describe the different kinds of Stipules.

4

9- a) Write detailed notes on the following:

4

- i) Plasmodesmata
- ii) Tyloses
- iii) Endodermis
- iv) Pericycle
- b) Describe the floral characters of Family Labiatae.

3½