

211121

M. Sc. (Fourth Semester) Examination, June 2021

BOTANY

Paper : ~~V~~ (Elective)

(Plant Taxonomy)

Maximum Marks : 42

Note: Attempt questions of all three sections as directed. Distribution of marks is given with sections.

Section-A

(Objective Type Questions)

7×1=7

Note: Attempt all the questions. Each question carries 1 mark.

1. Choose the correct answer :

(i) Who is father of Taxonomy :

- (a) Theophrastis
- (b) Hutchinson
- (c) De-Candole
- (d) John Ray

(ii) Phyllogenetic classification given by :

- (a) Hutchinson
- (b) Takhtajan
- (c) Cronquist
- (d) All of above

(iii) Flora of 'Damoh' and 'Chattarpur' given by :

- (a) B. D. Shukla
- (b) G. P. Rao

- (c) Both (a) & (b)
(d) None of above
- (iv) Alismiales order is order of :
- (a) Monocotyledons
(b) Dictotyledons
(c) Gymnosperms
(d) None of above
- (v) Rosales order have :
- (a) Inferior ovary indefinite stamen
(b) Inferior ovary with five stamen
(c) Inferior ovary with ten stamen
(d) All of above
- (vi) C. C. Chatterje classified botanical region of India into :
- (a) 10 classes
(b) 8 classes
(c) 9 classes
(d) 7 classes
- (vii) Which of the following plant is endemic plant of India :
- (a) Ficus-religiosa
(b) Madhuca-indica
(c) Azaricta-indica
(d) (b) & (c) both

Section-B

(Short Answer Type Questions)

5×2=10

Note: Attempt all five questions. One question from each unit is compulsory. Each question carries 2 marks.

Unit-I

2. Write aim and objectives of Taxonomy.

Or

Describe evolutionary trend in flower.

Unit-II

3. Write any phyllogentic system of classification with merits and demerits.

Or

Write natural system of classification with merits and demerits.

Unit-III

4. Write Rank of Taxa.

Or

Rule of Priority.

Unit-IV

5. Write phyllogeny of order Magnoliales.

Or

Write phyllogeny of orchidales.

Unit-V

6. Write vegetation of Indo-gangetic plain.

Or

Write Endonic plant of India.

Section-C

(Long Answer Type Questions)

5×5=25

*Note: Attempt all **five** questions. **One** question from each unit is compulsory. Each question carries 5 marks.*

Unit-I

7. What is Monophyly and Polyphyly?

Or

Write an essay on plant exploration work in India.

Unit-II

8. Write APG IV Angiospermic phylogenetic group of plant classification of Angiosperms.

Or

Write difference between Phylogenetic and natural system of classification.

Unit-III

9. Write an essay on Herbarium operations.

Or

Difference between Monograph and Flora.

Unit-IV

10. What is use of molecular botany in systematic?

Or

Write phylogeny of Zingiberales.

Unit-V

11. Write Speciation Concept.

Or

Write endemism and endemic plants in India.