

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPF-2185

M.Sc. (Final) Examination, 2022

BOTANY

Paper - VIII (c)

(Advanced Plant Physiology-II)

Time : 3 Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) Name The First GA to be structurally characterized.
- (ii) Define Plastochron.
- (iii) Define Non-Formative Effect.

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- (iv) Give Molecular Formula and Structure of Abscessic Acid.
- (v) What is the basis of classification of Brassinosteroids ?
- (vi) Name Photoinconvertible forms of Phytochromes.
- (vii) Define Photomorphogenetic Receptor.
- (viii) Define Epigeal Germination with example.
- (ix) Define Osmotic Homeostasis Signalling Pathway.
- (x) Define Photoinhibition.

Section-B

2. Describe briefly Biosynthesis of Cytokinins.

Or

Compare Mode of Action of IAA and GA.

3. What is the difference between Growth Regulator and Growth Inhibitor Physiologically ?

Or

Explain Biosynthesis of Ethylene.

4. What is plant defence ? Give its mechanism.

Or

Give biochemical properties of Phototropins.

5. Explain Circadian Rhythms in Plants.

Or

Explain juvenility and senescence.

6. What is Metal Toxicity ? Explain plant's defence mechanism against it.

Or

Explain role of ABA in response to stress in plants.

Section–C

7. Explain Biosynthesis pathway, mode of action and function of Auxins.
8. Define growth retardants. Give their physiological effects and biochemistry.
9. Give details of photochemical and biochemical properties of phytochromes.
10. Write a note on Seed Germination and Seed Dormancy.
11. What do you understand by Stress Physiology in Plants ? Explain in brief plant response to Biotic and Abiotic Stress.