



DM-003-001406

Seat No. _____

Bsc. (Sem. IV) (CBCS) Examination

March-2022

Botany : B-401

(Applied Botany)

(Old Course)

Faculty Code : 003

Subject Code : 001406

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) This question paper three questions. All questions are compulsory.
- (2) Write answers of all the questions in main answer sheet.
- (3) Draw neat and labelled diagram wherever necessary.
- (4) Figures to right side indicated full marks for the questions.

1 Answer the following objective types quotations : 20

- (1) Define : Lenticels.
- (2) Double fertilization was discovered by :
- (3) Leaf abscission is caused by :
- (4) Plants possess _____ hairs, which are capable of injecting substance into animals that cause irritation.
- (5) Who discover gibberellin ?
- (6) Give the full name of PEP ?
- (7) Minerals absorbed by root move to leaf through ?
- (8) Loading of phloem means _____.

- (9) CMS Means _____.
- (10) ICAR Means _____.
- (11) Define mass selections.
- (12) _____ grafting is used to 'bridge' a diseased or damaged area of a plant.
- (13) Biologists celebrate 5th June as _____.
- (14) The size of silt particle is _____.
- (15) Water pollution by _____ caused minamata disease.
- (16) The nutrient rich horizon of soil is _____.
- (17) Plants having similar genotypes produced by plants breeding are called _____.
- (18) The term antibiotic was coined by _____.
- (19) The loss of genes from a gene pool is called _____.
- (20) Write the size of typical herbarium sheet.

2 (A) Answering in brief : (Any Three) 06

- (1) Write note on : Nectary gland.
- (2) Write briefly on the following : Cork.
- (3) Define micronutrients and macronutrients.
- (4) What are three main functions of cytokinin ?
- (5) Define the term "Polyploidy".
- (6) Give one difference between molecular pharming and molecular farming.

2 (B) Answering in details : (Any Three) 09

- (1) Explain the processes of leaf abscission.
- (2) How are male gametes formed ?
- (3) Action mechanism of ethylene.
- (4) How CO₂ is fixed during C₄ cycle ?
- (5) Write a note : reasons for grafting.
- (6) Future of green revolution.

- 2** (C) Answering in details : (Any **two**) **10**
- (1) Explain the processes of double fertilization in angiosperms.
 - (2) What is periderm ? Describe the method of its formation and its uses.
 - (3) Discuss photosynthesis in C_3 plants.
 - (4) Describe the theory of transport of organic substance.
 - (5) Describe vegetative propagation.
- 3** (A) Answering in brief : (Any **Three**) **06**
- (1) Differentiate mor and mull humus.
 - (2) Explain Biomagnifications and Eutrophication.
 - (3) What is the purpose of anther culture ?
 - (4) Write short note on : Transgenic plants.
 - (5) Define digestive glands.
 - (6) Describe soil profile.
- 3** (B) Answer in details : (Any **Three**) **09**
- (1) What is global warming ? Write its effect on ecosystem.
 - (2) Explain in brief about components of soil.
 - (3) What is horticulture ? Explain the division of horticulture.
 - (4) Explain how botanist works in the area of plant breeding.
 - (5) State the source of water pollution.
 - (6) Write on types of water erosion.

3 (C) Write a note on : (Any **Two**)

10

- (1) Explain twenty first century plant breeding.
 - (2) Describe different method of soil conservation.
 - (3) What is remote sensing ? Write major application of remote sensing for the management of ecosystem.
 - (4) Describe the various method of plant tissue culture.
 - (5) What do you understand from the word floriculture?
What are the economic flowers grown in south India ?
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