

2019

B.Sc.

3rd Semester Examination

BOTANY (Honours)

Paper - SEC I-T

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full Marks. Candidates are required to give their answers in their own words as far as practicable. Illustrate the answers wherever necessary.

BIOFERTILIZER

1. Answer any five questions : $2 \times 5 = 10$
- a) What is biofertilizer?
 - b) Define phyllosphere.
 - c) What is organic manure?
 - d) What is biodegradable municipal waste?
 - e) Which is the suitable medium for *Azotobacter* ?
 - f) What are diazotrophs?
 - g) Which species of *Azospirillum* is generally found associated with the roots of C-4 plants?

[Turn Over]

(2)

h) What is green manure?

2. Answer any four questions : 5×4

a) What is VAM? Write the influence of VAM on growth and yield of crop plants. $2 + 3$

b) Write in brief the beneficial role of $3 + 2$

i) BGA in rice cultivation.

ii) *Rhizobium* as biofertilizer.

c) Write the method of vermi composting. Write two field applications of vermi compost with examples.

$3 + 2$

d) What is endomycorrhiza? Mention the advantages and disadvantages of organic fertilizers. $1 + 4$

e) Compare between Agricultural waste and Municipal waste. 5

f) Write a short note on Mass multiplication processes of *Rhizobium*. 5

3. Answer any one question : 10×1

a) Write short notes on 5×2

i) Recycling of agricultural waste.

ii) Describe the Methods of biocompost preparation.

b) Write in brief on the following : 2×5

i) Occurance and distribution of mycorrhiza.

ii) Actinorrhizal symbiosis.

iii) Recycling of Industrial waste.

(3)

- iv) Microbial inoculation.
 - v) Associative effect of different microorganisms.
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FLORICULTURE

Full Marks : 40

Time : 2 Hours

1. Answer any five questions : 2 × 5 = 10

- a) Define landscape gardening with example.
- b) Write note on 'Bonsai'
- c) How is the vase life of cut flowers prolonged?
- d) Distinguish between scion and stock.
- e) Give two methods for soil sterilization.
- f) What is called mulching?
- g) What are shade loving plants and light loving plants?
Give examples.
- h) Name two diseases of ornamental plants caused by
pests.

2. Answer any four questions : 5 × 4 = 20

- a) Give the methods for the cultivation of Rose flower.
5
- b) Compare indoor gardening and outdoor gardening
procedures. 2½ + 2½

[Turn Over]

(4)

- c) Classify ornamental plants. 5
- d) Write the role of plant growth regulators in nursery management. 5
- e) What is landscaping? Discuss on the importances of it. 2 + 3
- f) Discuss in brief the production and packaging methods of cut flowers. 3 + 2

3 Answer any one question : 10 × 1 = 10

a) Elaborate briefly :

i) Principles of Japanese garden designing

ii) Factors affecting productions in commercial floriculture. 6 + 4 = 10

b) Write notes on—

i) Cultivation of orchids.

ii) Planting and transplanting in nursery management.

5 + 5
