

2018

CBCS

3rd Semester

BOTANY

PAPER—SEC1T

(Honours)

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Biofertilizers

1. Answer any five questions : 5×2

- (a) What do you mean by mycorrhizae? Give example.
- (b) Name atleast two plants commonly used as green manure.

(Turn Over)

- (c) What is biodegradable municipal waste ?
- (d) Name the aquatic weed used as biofertilizer in paddy field. Give the scientific name of the organism symbiotically associated with it.
- (e) What is pelleting ?
- (f) Name any two earthworm species used for vermicompositing.
- (g) What is the name of the nodal quality control laboratory in India that is responsible for the analysis of / testing of biofertilizer samples.
- (h) What are diazotrophs ? Name some of them.

2. Answer any *four* questions : 4×5

- (a) How is composting different from Vermi-composting ?
- (b) Write in brief the beneficial role of
- (i) BGA in rice cultivation ;
- (ii) *Rhizobium* as biofertilizer. $2\frac{1}{2} + 2\frac{1}{2}$
- (c) Distinguish between Ectomycorrhiza and Endomycorrhiza.

- (d) What are the qualities that a good carrier possess for its use in the production of carrier based inoculants ?
- (e) Define the term biofertilizer. Mention the different types of biofertilizers citing atleast one example for each type. 1+4
- (f) What are organic fertilizer ? Mention the advantages and disadvantages of organic fertilizers. 1+4

3. Answer any one question : 1×10

(a) Write short notes on

- (i) Influence of VAM on growth and yield of crop plants ;
- (ii) Methods of Vermicomposting.

(b) Write in brief on the following :

- (i) Associative effect of different microorganisms ;
- (ii) Organic farming ;
- (iii) Green manuring ;
- (iv) Recycling of wastes ;
- (v) Microbial inoculation. 2×5

Floriculture

1. Answer any *five* questions :

5×2

- (a) Name two famous gardens of India.
- (b) How do you prolong the vase life of cut flowers?
- (c) What is the importance of Landscape gardening?
- (d) Define floriculture. Which state of India is the leading producer of flowers?
- (e) Write down the names of two growth regulators used in floriculture.
- (f) Name four cut flowers exported from India.
- (g) What is bonsai?
- (h) Distinguish between 'scion' and 'stock' with example.

2. Answer any *four* questions :

4×5

- (a) Name plants used as hedge mentioning one from each of the following category :
 - (i) Conifers ;
 - (ii) Shrubs ;

- (iii) Cacti or succulents ;
 - (iv) Foliage plants ;
 - (v) Palms.
- (b) Explain the present status & scope of floriculture in global market.
- (c) Write the full names of agricultural / or horticultural Universities in India having full fledged floricultural departments along with the names of states they belong to.
- (d) Define briefly the following garden features
- (i) Edges (ii) Shrubbery.
- (e) Enumerate briefly the cultivation of Gladiolus under following heads :
- (i) Propagation ;
 - (ii) One serious disease & its management ;
 - (iii) Corm storage. 2+1+2
- (f) Write a short note on diseases and pests of ornamental plants.

3. Answer any *one* question :

1×10

(a) Write in brief about topiary, winterring, mulching, polyhouse and stoping or pinching in routine garden operation.

(b) What are the factors regulating flower production? Write on the processes of cutting and packaging of flowers from the field.

5+5
