



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - III

Subject : BOTANY

Paper : SEC 1 - T

Full Marks : 40

Time : 2 Hours

*Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.*

(Biofertilizers)

(Theory : Marks - 40)

Group - A

A. Answer any **three** of the following questions :

12×3=36

1. How is *Rhizobium* isolated in the laboratory? Briefly state the procedure of application of rhizobial inoculants on leguminous plants. Describe Actinorrhizal symbiosis briefly.
4+5+3
2. What is BGA? Briefly describe the role of BGA in rice cultivation. Mention the process of nitrogen fixation by BGA.
2+4+6

3. What is shelf life of carrier based fertilizer? Explain the factors affecting the shelf life of inoculant. Briefly describe isolation and mass multiplication of *Azotobacter*.
3+3+6
4. What is lime pelleting? What is its significance? What are the tips for buying and storing of biofertilizer?
2+3+7
5. Define VAM. How to select efficient VAM fungi for inoculum production? State the benefits of mycorrhizal biofertilizer application.
2+4+6
6. Differentiate between green manure and brown manure. Explain briefly the methods of vermicomposting. What are the advantages and limitations of vermicomposting?
3+4+5

Group - B

B. Answer any *two* of the following questions : 2×2=4

1. Name two cyanobacteria and their role as biofertilizer.
 2. What is dual inoculation?
 3. Define algalization.
 4. How to pack biofertilizer with associative nitrogen fixer.
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Or,
Paper - SEC 1-T
(Floriculture)
(Theory : Marks - 40)
Group - A

A. Answer any *three* of the following questions : 12×3=36

1. What is the importance of landscape gardening. Explain the vegetative methods of propagation used in routine garden operations. 6+6
2. Describe defoliation, mulching and topiary with their significance in nursery management. 4+4+4
3. Describe the characteristics of Italian gardens. Explain general principles of garden design. 6+6
4. Describe the harvesting of spikes and post harvest operations of gladiolus. State the methods of storage of cut flowers. 3+3+6
5. Briefly describe on physical condition required for rose cultivation. What is pruning? write down the objectives of pruning. 6+2+4
6. Write short notes on :
 - (a) Bonsai
 - (b) Shrubbery
 - (c) Hedge 4+4+4

Group - B

B. Answer any *two* of the following questions : 2×2=4

1. Write two important characteristics of topiary plants.
 2. Define pinching.
 3. Write two characteristics of mughal gardens.
 4. Give botanical name of two ferns used as ornamental plants in India.
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