



ବିଦ୍ୟାସାଗର ବିଶ୍ୱବିଦ୍ୟାଳୟ

**VIDYASAGAR UNIVERSITY**

**B.Sc. (Major) Honours Examination 2021**

**(CBCS)**

**4th Semester**

**AGRO SERVICE**

**PAPER—SEC2T & SEC2P**

*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.*

**SEC2T : NURSERY AND GARDENING**

**Group - A**

Answer any *one* question.

1×15

1. State the differences between (with example) :

5×3

- (a) Nursery and Gardening ;
- (b) Green house and Glass house ;
- (c) Seed and Seedlings ;

(d) Layering and Grafting ;

(e) Seed dormancy and Seed viability.

2. What are the objectives & scope and how to build up an infrastructure for a nursery? State its planning and seasonal activities. What are the differences between direct seeding and transplanting of saplings?  
5+5+5
3. What is seed bank? What are major differences between orthodox and recalcitrant types of seeds? State the methodology of seed testing and certification, treatment of cutting, rooting medium and planting of cuttings.  
3+3+9
4. Write the objectives, scope and different types of gardening. What is hardening of plants? State the procedure of storage and marketing of various garden products.  
3+3+9

#### **Group – B**

Answer any *one* question. 1×10

5. State the general procedure of Seed production technology of any suitable crop. 10
6. Write in brief about the different gardening common operations including land management, planting, manuring, irrigation, management of pests (weed, insects & diseases) and harvesting. 10

#### **PRACTICAL : SEC2P**

Answer any *one* question. 1×15

1. Write the brief procedure of germination and viability test of any suitable crop. How you will do air layering of a fruit crop and state the procedure of grafting in a fruit crop. Briefly describe the cutting and induction of roots of hard wood and softwood plants.

2. State your brief experience through comments of visiting in a glass house, mist chamber, shade house, shade nets and green house related to establishment, raising of crops, advantages and disadvantages.

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## SEC2T : FLORICULTURE

### Group – A

Answer any *one* question.

1×15

1. Why a need of soil sterilization? In Tea garden why shading is useful? What is the advantage of using mulching? State the role of plant growth regulators. Write the advantages of using Bonsai in indoor gardening. 3×15
2. State the importance and scope of floriculture and landscape gardening. State the difference between sexual and vegetative methods of propagation. Write pot culture advantages with cultivation of plants in pots. Production and packaging of important cut flowers. Important pests (weed, insect and disease) of ornamental plants and their control measures in brief. 3×15
3. What is the use of ornamental plants? State the difference between flowering annuals and herbaceous perennials. What are divine vines? Write the principles of garden designs of any one garden (English, Italian, French, Persian, Mughal and Japanese) and its features. 3×15
4. What is commercial floriculture? State the factors affecting flower production. State briefly about the common cultivation of important cut flowers (any *two*). Name some famous gardens of India. 3×15

**Group – B**

Answer any *one* question. 1×10

5. Write in brief about Importance and scope of commercial floriculture. State the cultivation procedure of plants in pots. 2×5
6. State about Ornamental bulbous and foliage plants; Cacti and succulents; Palms and Cycads & Ferns and Selaginellas. 2×5

**PRACTICAL : SEC2P**

Answer any *one* question. 1×15

1. State practical creation of costly Bonsai and a general vine (grape/betel). Write its advantages in both higher income and lesser cost.
2. Prepare a layout of any suitable garden design of India. State its modern improvement for better advantages.

**SEC2T : PRINCIPLES OF MANAGEMENT AND AGRIBUSINESS****Group – A**

Answer any *one* question. 1×15

1. Define agribusiness with example. State the history and scope of agribusiness in India and global sectors. What are the input agribusiness and farm product sector agribusiness? Write the importance and limitations of planning of an agribusiness. 5×3
2. State the management levels and managerial roles in agribusiness. Write the management skills and elements. What are the levels, process & functions of management? How you plan an agribusiness? State its characteristics and purpose of planning. 5×3

- 3.** Write in brief about the 5×3
- (a) Fundamentals of information and Communication.
- (b) Ways & means of solving agricultural problems with information systems.
- (c) Definition and objectives of Agricultural Information System.
- (d) Remote Sensing, Geographic data and maps and information system.
- (e) Principles and Process of organization.
- 4.** State in brief about : 5×3
- (a) Importance and characteristics or nature of organization.
- (b) Steps and types of planning of Agro business.
- (c) Management of Agro business.
- (d) Nature, components and distinctive features of Agri-business Management.
- (e) Farm business analysis with particular reference to systems of bookkeeping.

**Group – B**

- Answer any *one* question. 1×10
- 5.** Write in brief about the importance of agri-business in Indian economy with changing dimension. State about Geographical information system. 2×5
- 6.** Write the various business models in agri-business indicating farm income. 2×5

**PRACTICAL : SEC2P**

Answer any *one* question.

1×15

1. How you keep farm records ? What are the systems of book keeping ? State the farm budgeting techniques and types.
2. Write in brief about the preparation of financial balance sheet ratio analysis indicating all important financial functions.

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Vidyasagar University