



THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. DEGREE PROGRAMME – LEVEL 05
BOU3209/ BOE-5209 – HORTICULTURE
FINAL EXAMINATION 2016/2017
DURATION: THREE (03) HOURS

INDEX NUMBER.....

REGISTRATION NUMBER.....

Date: 22nd January 2018

Time: 9.30-12.30am

This paper consists of two parts. **Part A and Part B**

Part A –Structured questions

Answer **all** questions.

Write answers **only** in the space provided

There are three **(03)** questions.

Part B-Essay type questions-You are required to answer **only four (04)** questions out of **Six (06)** questions given.

Part A

1. Write short answers **in the space given.**

(a) List **Five (05)** methods of indoor gardening styles that are used for growing plants under limited space conditions.

- 1.....
- 2.....
- 3.....
- 4.....
- 5.....

(b) State the step- wise procedure of preparing one container gardening style you mentioned in part (a).

- 1.....
- 2.....
- 3.....
- 4.....
- 5.....
- 6.....
- 7.....
- 8.....
- 9.....
- 10.....

(d) Write down the botanical names of **four (04)** foliage plants or flowering plants which can be used in preparing container garden you mentioned above

- 1.....
- 2.....
- 3.....
- 4.....

(e) State **three (03)** most common diseases can be observed in the above mentioned foliage plants or flowering plants.

- 1.....
- 2.....
- 3.....

02 Write short answers **in the space given.**

Temperature is one of the major factors effecting the growth of plants under controlled environmental conditions. The temperature inside green houses can be controlled by active and passive methods

(a) Write down **four (04)** passive methods which can be used to increase the temperature intensity in green houses?

- 1.....
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- 2.....
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- 3.....
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(b) Translocation in the phloem of a plant can be disrupted by girdling of tree bark. Write down the procedure of girdling of a tree.

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3 The table below indicates some common cut flowers and corresponding method of propagation and irrigation, and systems employed for packaging.

(a) **fill- out the blanks of the table below using appropriate words/sentences**

| Flowers | Propagation method | Method of irrigation | System/s of package |
|----------------|--------------------|----------------------|---------------------|
| Anthurium | | | |
| Orchid | | | |
| Roses | | | |
| Chrysanthemums | | | |

(b) Briefly state the **three (03)** methods that can be used in scarification of seeds? .

(i).....

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(ii).....

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(iii).....

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Part B

Essay type questions

Answer **only Four (04)** questions out of **Six (06)** questions

- 1 (a) List out **three (03) different** soilless media that could be used to grow tomato at commercial scale.
(b) Give reasons for the selection of each soilless medium.
(c) Discuss the advantages and disadvantages of each medium.
- 2 (a) Explain **three (03) different** vegetative propagation methods which are being used in floriculture crop production in Sri Lanka giving specific examples for each method.
(b) Describe the importance of current practice of preparing field bed nurseries for vegetables.
3. (a) Briefly explain the basic principles needed to be considered in floral arrangements?
(b) List out **five (05)** methods are being used in flower drying? (c) Explain **two (02)** of the methods listed above.
4. Discuss the importance of proper postharvest handling of tomato, Cabbage Roses and cut foliage
5. *“Micropropagation is one of the widely used vegetative propagation method in economically important crops”*
(a) Discuss the advantages of micro propagation over conventional system of propagation?
(b) Discuss how would you design roofing of a green house to maintain tissue cultured plants after the acclimatization process?
6. *“Organic farming is widely recognised as a sustainable farming system in contrast to the farming systems which use inorganic fertilizers extensively”*
(a) Critically discuss the above statement by highlighting the advantages and disadvantages of the two systems of farming.
(b) Briefly describe the constraints faced by the Sri Lankan farmers in adoption of organic farming ?

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