



THE OPEN UNIVERSITY OF SRI LANKA

B.Sc. DEGREE PROGRAMME – LEVEL 05

BTU 3207 – HORTICULTURE

FINAL EXAMINATION

DURATION: THREE (03) HOURS

REGISTRATION NO.

Date : 13th July 2010

Time : 1.00 -4.00pm

This paper consists of two parts

Part A and Part B

Part A –Structured questions- Answer all questions.

Questions should be answered on the question paper itself. There are four (04) questions and six (06) pages in this question paper.

Part B-Essay type questions-Answer only Four (04) questions out of **Six (06)** questions

Part A

01. (a) State the importance of nursery management for horticultural crops

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(b) Name three(03) vegetables that could be raised in nurseries showing different time duration of nursery period

Vegetable

Duration in the Nurseries (days)

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(c) Briefly state the 'Preparation of field bed nursery'

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(d) What do you mean by 'Solarization'. Explain your answer with illustrations

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2. Define the following terms

Surface irrigation.....
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Basin irrigation
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Sprinkler irrigation
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Drip irrigation
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(b) Complete the following table.

Nutrient	02 Common sources	Deficiency symptoms in its absence
Nitrogen		
Potassium		
Magnesium		
Phosphorous		

3(a) What do you understand by Landscaping?

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(b) State **Five(05)** changes you have made in your home garden to improve the aesthetic value

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(c) Name **Five (05)** ornamental plants you can grow in your home garden

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(d) What cultivation systems that could be applied for growing of orchids and anthuriums

Orchids

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Anthuriums

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4 (a) Define the following

Thinning out

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Apical dominance

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Espalier system

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(b) State **Four(04)** Layering systems

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(c)Write the procedure of common layering systems for tropical and subtropical trees and shrubs. Illustrate your answer

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Part B-**Essay type questions**

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

1. (a) Describe different hydroponic techniques and indicate the type of crop that can be grown using each of these techniques
(b) State the advantages and disadvantages of using hydroponic techniques in horticultural crop production.
2. Write an account on postharvest handling of Anthuriums, Orchids and Gerbera
- 3 (a) List the factors that should be taken into account in the selection of a species and a cultivar of a vegetable to be cultivated in a particular locality.
(b) Describe **two (02)** of the above mentioned factors
- 4.(a) What are the irrigation systems suitable for citrus orchards?
(b) Describe the common diseases you observed in following vegetables: Tomato, Egg plant, Luffa (Ridged gourd), Cucumber
- 5.(a) What are the common methods of grafting systems?
(b) How would you do grafting of the vegetable/Fruit crop grown in your home garden? Describe the method indicating the vegetable/fruit crop
6. (a) Explain how texture and structure of soil influence plant growth.
(b) Describe the term 'Cation exchange capacity' and affect on the nutrient availability in the soil.