



**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 2011

Time : 9.30-12.30 pm

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)What do you understand by ‘aeroponics’ cultivation of plants

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(b) Name three(03) crops that could be grown in this system

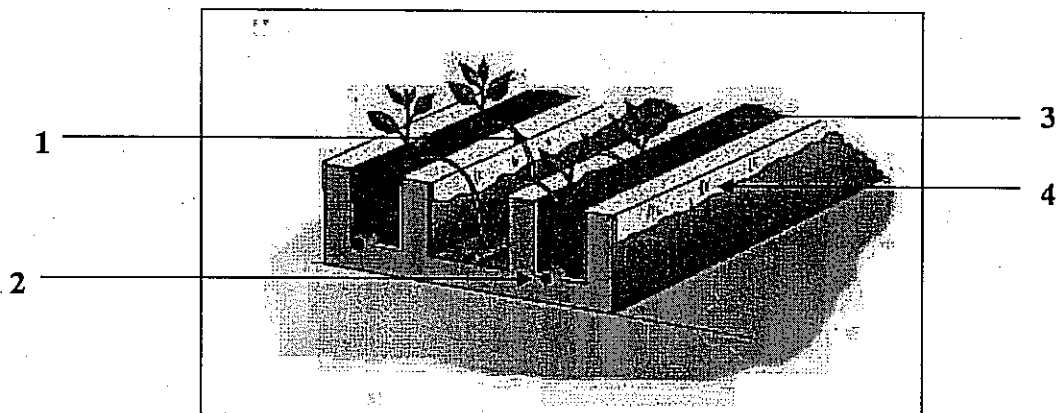
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(c) Illustrate the 'aeroponics' system of cultivation with labeled diagrams

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(d) Identify the following system and fill in the blanks from 1-4

(a) What is this system?.....



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2.....
3.....
4.....

2. Define the following terms

De-suckering.....

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Limbing up.....

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Topping

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Invigoration of shoots

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(b) Complete the following table.

Fruit/ Vegetable	02 Common diseases	Importance as Fruit/Vegetables	Field establishment
Tomato			
Eggplant			
Cabbage			
Carrot			

3 (a) How do you establish herbaceous plants in your home garden

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(b) State the categories of herbaceous plants by giving two examples for each category?

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

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(d) Light is the major factor for the growth of plants in Green houses. The light inside the green houses can be controlled by active and passive methods
Write **Four (04)** passive methods used for to increase light intensity

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4 (a) Define the following
Stratification

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Apomixis

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Espalier system

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(b) Translocation in the phloem is disrupted by girdling of tree bark. Write the procedure of girdling of tree bark

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Part B-**Essay type questions**

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

1. (a) What are the importance of maintaining nurseries of horticultural crops?
 (b) State major types of nurseries found in Sri Lanka?
 (c) Explain the importance of maintaining vegetable nursery for vegetable production and its significance in vegetable industry?

2. Give a concise description on cultivation, propagation, harvesting practices employed for *Gerbera hybrida* and Orchids

3. Discuss how would you manage the plantation of pineapple (*Ananas comosus*) and mango (*Mangifera indica*) with respect to the following
 - (a) Mulching
 - (b) Irrigation

4. (a) Discuss the factors that needs to consider when choosing the irrigation method?
 (b) Compare and contrast sprinkler irrigation vs drip irrigation
 (c) Describe the common diseases you observed in following Fruits: Papaya, Citrus (Orange) and banana

5. (a) Discuss the importance of grafting and budding?
 (b) How would you do budding/grafting of the vegetable/Fruit crop grown in your home garden? Write the steps that you need to follow to make a successful budding or grafting of a fruit/Vegetable crop.
 (c) State importance of **micropropagation** of crop plants

6. 'Fertilizers are substances supplied directly or indirectly to crops in order to promote their growth, yield and quality'
 - (a) Name/List **two(02)** inorganic fertilizers that can be used for supplying Nitrogen, Phosphorous and potassium to the soil.
 - (b) Briefly mention the methods of fertilizer application
 - (c) Explain 'Passive process of making compost'