

**CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ**

Semester 1 Repeat Examinations 2009/10

Module Title: Horticulture Systems

Module Code: AGRI7005

School: Science

Programme Title: Bachelor of Science in Herbal Science

Programme Code: SHERB_8_Y2

External Examiner(s): Prof. E. Williamson, Dr. D. Clare
Internal Examiner(s): Mr. Joseph Croke

Instructions: Answer any **FOUR** questions. All questions carry equal marks.

Duration: 2 Hours

Sitting: Autumn 2010

Requirements for this examination:

Note to Candidates: Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper.
If in doubt please contact an Invigilator.

- Q. 1 (a)** Explain the meaning of the term ‘Biodynamics’. **10 Marks**
- (b)** Name **one** difference between conventional **and** organic practice **and one** difference between biodynamic **and** organic horticulture **5 Marks**
- (c)** Outline briefly the **four** concepts of life according to biodynamic practice? **10 Marks**
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- Q. 2 (a)** Explain the meaning of ‘**organically produced**’ in crop production **5 Marks**
- (b)** Discuss the organic cultivation methods for weed **and** disease control **and** essential nutrient provision that you saw used at the Ballymaloe Organic unit in East Cork. **20 Marks**
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- Q. 3** Discuss Companion planting use in Herbal and Vegetable productions. **25 Marks**
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- Q. 4** Discuss the cyclic forces thought to affect crop growth **and** the cultivation practices used in biodynamics based on these rhythms. **20 Marks**
- (b)** In an ascending moon, the following should be done
- | | | |
|---------------|------------------------------|------------------------------|
| grafting | <input type="checkbox"/> yes | <input type="checkbox"/> no? |
| transplanting | <input type="checkbox"/> yes | <input type="checkbox"/> no? |
- 5 Marks**
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- Q. 5 (a)** Outline the essential **similarities** in practice (overlap, acceptable in all) of conventional, organic and biodynamic horticultural systems of production. **15 Marks**
- (b)** Discuss briefly the use of Integrated Pest Management in pest and disease management. **10 Marks**
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- Q. 6 (a)** Discuss the production of honey **and** benefits to herbal **and** horticultural crops by the Honey Bee (*Apis mellifera subsp. mellifera*). **20 Marks**
- (b)** Outline any **two** potential health benefits of honey consumption. **5 Marks**