



2ND SEM. 2015/2016

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN HORTICULTURE YEAR I &
BACHELOR OF SCIENCE IN HORTICULTURE YEAR IV

COURSE CODE: HRT102 / HORT 405

TITLE OF PAPER: ORGANIC FARMING

TIME ALLOWED: TWO [2] HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

**DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF
INVIGILATOR**

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS**QUESTION 1**

- a) Define crop rotation. (5 marks)
 b) Describe the factors to consider when planning a crop rotation system. (10 marks)
 c) Provide a typical example of a 3-year crop rotation plan. (10 marks)
- [25 MARKS]**

QUESTION 2

Discuss the principles of organic agriculture under the following:

- a) The principle of health. (7 marks)
 b) The principle of ecology. (8 marks)
 c) The principle of fairness. (5 marks)
 d) The principle of care. (5 marks)
- [25 MARKS]**

QUESTION 3

- a) Give reasons why 'certified organic food' is more expensive than 'conventional food'. (7 marks)
 b) Discuss the environmental benefits of organic agriculture as follows;
 i) Sustainability over the long term. (5 marks)
 ii) Water. (5 marks)
 iii) Soil. (8 marks)
- [25 MARKS]**

QUESTION 4

- a) Distinguish between 'natural' and 'organic foods'. (10 marks)
 b) Discuss fertilization and crop protection in organic agriculture. (15 marks)
- [25 MARKS]**

QUESTION 5

Describe the phases of the composting process as follows:

- a) Heat phase. (15 marks)
 b) Cooling phase. (5 marks)
 c) Maturation phase. (5 marks)
- [25 MARKS]**