



**2<sup>ND</sup> SEMESTER 2016/2017**

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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: HRT 102 / 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 INVIGILATOR**

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

a) Describe the potential risks related to genetically modified organisms (GMOs) under the following:

- i) Potential risks related to human health. (6 marks)
- ii) Potential risks related to the environment. (6 marks)
- b) Distinguish between 'biodiversity' and 'agrobiodiversity'. (13 marks)

[25 MARKS]

**QUESTION 2**

Discuss the following concepts:

- a) Nature farming (8 marks)
- b) Natural farming (8 marks)
- c) Good agricultural practices (GAP) (9 marks)

[25 MARKS]

**QUESTION 3**

Discuss the three ethical principles of 'permaculture' following these guidelines:

- a) Care of the earth (8 marks)
- b) Care of the people (10 marks)
- c) Return of surplus to earth and people (also called "fair share") (7 marks)

[25 MARKS]

**QUESTION 4**

Describe the following:

- a) Construction of a compost heap (9 marks)
- b) Preparation of liquid fertilizer (5 marks)
- c) Preparation of liquid manure (5 marks)
- c) Preparation of a pepper spray (6 marks)

[25 MARKS]

**QUESTION 5**

Describe the following:

- a) Synthetic mulches (7 marks)
- b) Organic mulches (9 marks)
- c) Green manure and cover crops (9 marks)

[25 MARKS]