



1st SEMESTER 2015/2016

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY YEAR 2
COURSE CODE: CP 202

TITLE OF PAPER: MUSHROOM PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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CHIEF INVIGILATOR**

QUESTION 1

- a. What are mushrooms? (2 marks)
 - b. Which class of fungi produces mushrooms? (2 marks)
 - c. What is the main function of hyphae? (2 marks)
 - d. List five good attributes of mushrooms (compared with other crops) (5 marks)
 - e. Why should a mushroom mycelium culture not be prepared from the mushroom cap? (6 marks)
 - f. Describe the different types of hyphae based on the number of nuclei in each cell of the hyphae (8 Marks)
- [25 Marks]**

QUESTION 2

Discuss the different types of toxins produced by poisonous mushrooms and for each toxin, give a species of mushrooms which forms it.

[25 Marks]

QUESTION 3

- a. Define the following terminologies in mushroom production:
 - i. Carrier (3 Marks)
 - ii. Tissue culture (3 Marks)
 - iii. Spawn culture (3 Marks)
 - iv. Mother culture (3 Marks)
 - v. Substrate (3 Marks)
 - b. i Explain why one should not subculture a mushroom mycelium culture indefinitely. (4 Marks)
 - ii. What is the recommended number of times that one can subculture a mushroom mycelium culture (2 Marks)
 - c. What carrier would you recommend for oyster mushroom spawn production in Swaziland and why? (4 Marks)
- [25 Marks]**

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QUESTION 4

You are required to give advice to a farmer who wants to embark on oyster mushroom farming in the hot and dry Lowveld of Swaziland.

- (i) What advice would you give to the farmer on inputs for construction of a cropping house and how to construct the mushroom cropping house. (15 Marks)
 - (ii) What substrate(s) would you recommend to the farmer and why? (10 Marks)
- (25 Marks)**

QUESTION 5

Draw and label a diagram of a typical mushroom and explain the functions of each part.

(25 Marks)