



201

2nd SEM. 2016/17

PAGE 1 OF 2

**UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER**

PROGRAM : **BACHELOR OF SCIENCE IN FOOD SCIENCE,
NUTRITION AND TECHNOLOGY YEAR IV**

COURSE CODE : **FSNT 411**

TITLE OF PAPER : **FUNCTIONAL FOODS AND DIET
SUPPLEMENTS**

TIME ALLOWED : **TWO (2) HOURS**

INSTRUCTIONS : **ANSWER QUESTION ONE (1) AND ANY OTHER
TWO (2) QUESTIONS.**

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

QUESTION 1 (COMPULSORY)

- (a) Define functional foods and outline the defining characteristics of functional foods.
(15 Marks)
- (b) Describe the challenges in the development of functional oat products and the preparation of symbiotic oat yoghurt.
(15 Marks)
- (c) Identify the required characteristics of functional ingredients to produce functional gums and jellies.
(10 Marks)

[TOTAL MARKS = 40]

QUESTION 2

- (a) Write short notes on the following:
i. Bioactive (give example)
ii. Inulin
iii. Whole grain
(15 Marks)
- (b) Describe the technological perspectives in terms of drawback and solutions of making fibre-enriched bread.
(15 Marks)

[TOTAL MARKS = 30]

QUESTION 3

- (a) List **five (5)** health benefits of probiotics and ways in which probiotics are provided/delivered.
(15 Marks)
- (b) Name the compounds in lipids which are associated with health benefits and classify them based on different criteria.
(15 Marks)

[TOTAL MARKS = 30]

QUESTION 4

- (a) Discuss Challenges associated with the regulation of functional foods
(15 Marks)
- (b) Describe the main areas for technological challenge in developing functional foods.
(15 Marks)

[TOTAL MARKS = 30]