

BOWEN UNIVERSITY, IWO, OSUN STATE
BIOCHEMISTRY PROGRAMME
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
2022/2023 SESSION

SECOND SEMESTER EXAMINATION

COURSE CODE: BCH 312

COURSE TITLE: FOOD BIOCHEMISTRY

CREDITS: 2

TIME: 2 HOURS

LEVEL: 300

**INSTRUCTIONS: QUESTION ONE IS COMPULSORY AND
ANSWER ONE QUESTION EACH FROM SECTION B AND C
SECTION A**

QUESTION ONE

(a) In a village, it was observed that many children between the ages of 5 and 12 have bow legs. As an expert in Food Biochemistry, answer the following questions:

i. The nutritional deficiency(ies) the children might be suffering from

(2 marks)

ii. The recommended diet(s) that might help forestall future incidence of the nutritional deficiency(ies)

(4 marks)

iii. Food analysis that would help ascertain that the required nutrients are adequate.

(4 marks)

(b) i. What is food poisoning?

(2 marks)

ii. What is food intoxication?

(3 marks)

iii. List five signs and symptoms of food poisoning

(5 marks)

SECTION B

QUESTION TWO

(a) Define the following terms:

i. Food

(3 marks)

ii. Health

(2 marks)

(b) Explain the role of food nutrients in health and wellness

(15 marks)

QUESTION THREE

Discuss the role of food toxins and toxicants in the onset and progression of diseases.

(20 marks)

SECTION C

QUESTION FOUR

Discuss the bio-deterioration of the following food products:

(a) Milk and milk products

(6 marks)

(b) Oils

(7 marks)

(c) Vegetables

(7 marks)

QUESTION FIVE

Write on the following types of food contamination:

(a) Biological contamination

(6 marks)

(b) Chemical contamination

(7 marks)

(c) Cross contamination

(7 marks)