



CRAWFORD UNIVERSITY
Faith City, Igbesa, Ogun State.

2015/2016 HARMATTAN SEMESTER EXAMINATIONS

COLLEGE: NATURAL AND APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

PROGRAMME: MICROBIOLOGY

COURSE CODE: MCB 311

COURSE TITLE: BIODETERIORATION

UNIT: 2

TIMES: 2 1/2 HOURS

INSTRUCTION: ANSWER QUESTION ONE (1) AND ANY OTHER THREE QUESTIONS.

1. (a) What is biodeterioration and what do you understand by Biodeterioration Potential? (5 Marks)
(b) What are the classes of biodeterioration? (4 Marks)
(c) Write a detailed essay on the mechanism of biodeterioration of foods.(6 Marks)
(d) List the factors that affect microbial growth favouring the biodeterioration of food. (5 Marks)
2. A certain sporulative, Gram-positive, obligate anaerobe is implicated in food poisoning in a local canned food manufacturing company.
(a) Name the likely organism (2 Marks)
(b) Write a concise but detailed note on the organism and its mechanism for causing disease.(8 Marks)
3. Write short notes on the following :
 - i. Botulism (3 Marks)
 - ii. Scombroid Poisoning (3 Marks)
 - iii. Aflatoxins (4 Marks)
4. (a) What are the various methods for ensuring textile Biostability (5 Marks)
(b) Textile materials are damageable by bacteria and microscopic fungi.
 - i. List 5 textile damaging bacteria
 - ii. List 5 textile damaging fungi (5 Marks)
5. (a) Emulsion paints are more susceptible to biodeterioration than gloss paints. Why? (4 Marks)
(b) Write a brief essay on the biodeterioration of paints and painted surfaces . (6 Marks)
6. (a) What are the factors leading to the biodeterioration of jet fuel? Can it be prevented? (5Marks)
(b) What are the measures used in biodeterioration control? (5Marks)