



**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF MICROBIOLOGY**

FIRST SEMESTER EXAMINATION 2013/2014 SESSION

**COURSE CODE: MCB513 (3 CREDITS)
COURSE TITLE: GENERAL TOXICOLOGY
CLASS: 500 LEVEL
TIME ALLOWED: 2 hrs. 30 min**

INSTRUCTION: Answer five questions in all

- 1(a) What are the predisposing causes and significance of plant toxins?
- 1(b). Enumerate the different types of toxins in plants.

- 2(a) In a tabular form, compare and contrast the different characteristics of bacterial toxins.
- 2(b). Enumerate the ways in which these toxins can be eliminated (where possible).

- 3(a). What are food additives?
- 3(b). What are the health implications on man?

4. Write briefly on the following;
 - i. Cadmium
 - ii. Enzyme inhibition/activation
 - iii. Anthropogenic pollutants

- 5(a). List four characteristics of an ideal pesticide.
- 5(b). Discuss the effect of pesticides on beneficial soil microorganisms.

6. How does the persistency of Dichlorodiphenyltrichloroethane (DDT) affect the trophic levels of food chain?

- 7(a). What are the changes ionizing radiation cause in cells?
- 7(b). Copy and complete the table below with the appropriate dose and biological effect of radiation on human:

SOURCES	DOSE	BIOLOGICAL EFFECT
Nuclear bomb blast		
X-rays for cancer patients		
X-ray of the intestine		
Natural background radiation		