## BOWEN UNIVERSITY, IWO COLLEGE OF HEALTH SCIENCES NUTRITION AND DIETETICS PROGRAM 2019/2020 FIRST SEMESTER EXAMINATION

**COURSE CODE: NTD 415** TIME: 2HRS 30MIN

COURSE TITLE: TOXICANTS IN FOOD

INSTRUCTION: ANSWER FIVE QUESTIONS

## Each question carries equal mark.

1. a. What are natural toxicants? b. Write briefly on the following

i) Solanum Alkaloids

- ii) Cyanogenic Glycosides
- iii) Mycotoxins
- iv) Food additives

(12marks)

(3marks)

2. a. A chemical is determined to be toxic depending on some factors. List 5 of these factors

b. Cooking food is plausible, however, a wide variety of chemicals with toxic properties are formed during the process of cooking. Discuss (10marks)

- 3. a. Write short notes on the following
  - Toxic dose low i)
  - ii) Toxic concentration low
  - iii) Lethal dose low
  - iv) Lethal dose fifty
  - Lethal concentration low

(10 marks)

- b. Toxicants that are insoluble in the fluids of the gastrointestinal tract are generally excreted while others are soluble, absorbed through the lining of the gastrointestinal tract and then transported by the blood to internal organs where they can cause damage. Give 5 differences between the acute and chronic effect/damage of toxicants. (5marks)
- 4. a. Highlight 5 actions consumers can take to help prevent foodborne illnesses b. Food intoxications are caused by eating foods containing natural toxins or, more likely, microbes that produce toxins. Discuss their effects on humans. (10marks)
- 5. a. As a consumer, what are your expectations while purchasing goods? b. Write on the role of food labels in consumer education (7marks) (8marks)
- Consumer is an important component of society and business has an obligation to him. Discuss the major problems faced by consumers. (15 marks)