

**BOWEN UNIVERSITY, IWO  
COLLEGE OF HEALTH SCIENCES  
NUTRITION AND DIETETICS PROGRAM  
2021/2022 SECOND SEMESTER EXAMINATION**

**COURSE CODE: NTD 302  
CREDIT UNIT: 2  
TIME: 2HRS**

**COURSE TITLE: PRINCIPLES OF HUMAN  
NUTRITION II**

**INSTRUCTION: ANSWER FOUR QUESTIONS IN ALL**

1. a) Food and the nutrients it contains can interact with drug when taken. Discuss the  
i) Effect of food on drug intake 6.5marks  
ii) Effect of drug on food intake 6.5marks  
b) Give 3 examples of drugs, its use and interactions with food 4.5marks
2. a) What is bioavailability? 2 marks  
Write briefly on  
i) Bioavailability of minerals 7 marks  
ii) Bioavailability of vitamins 6 marks  
b) List 5 intrinsic factors to ingested foods that influence the rate of nutrient uptake from the gut. 2.5 marks
3. a) Food is important for health. Discuss the characteristics of food. 10 marks  
b) Write briefly on these anti-nutrients and their effect on human health.  
i) Saponin 3.5 marks  
ii) Oxalate 4 marks
4. a) Write briefly on the following  
i) Nutrient toxicity iv) EAR  
ii) RDA v) AI  
iii) Tolerable upper intake level 10 marks  
b) Mention 5 micronutrients, their tolerable upper intake levels and effects on adults 7.5 marks
5. a) Write briefly on  
i) Food-based dietary guidelines. 2.5 marks  
ii) Food and Nutrition security 5 marks  
b) Discuss the Dietary guidelines for Americans (2020-2025) and its key recommendations 10 marks