

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

COURSE CODE: NTD 412

CREDIT UNIT: 3

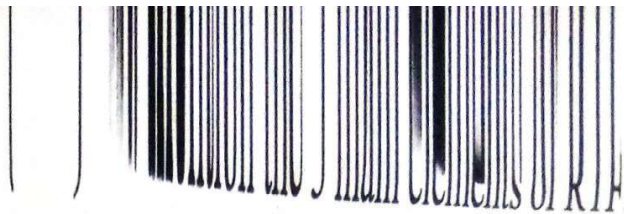
TIME: 1HRS 30 MIN

**COURSE TITLE: ADVANCES IN NUTRITION AND
DIETETICS**

INSTRUCTION: ATTEMPT ALL QUESTIONS

Section A

1. Functional food raises the question - is it a food or a drug? Discuss briefly. (5marks)
2. The '*functional*' effects of foods prove active ingredient in the food giving beneficial effects that improves health. Give 4 examples of functional foods stating the active ingredient in each one and 2 benefits each. (5 marks)
3. The most important component of successful sport training and performance is to ensure support for energy expenditure, maintain strength, endurance, muscle mass and overall health. In order to achieve this, state the nutrition needs as a sport nutritionist to Kola who is an upcoming athlete. (5marks)
4. State 5 advantages of eating right in sport nutrition (5marks)
5. Highlight 3 aims of nutrigenomics and give 2 mechanisms by which nutrients influence gene expression. (5marks)
6. Give the term to the following definitions
_____ a broader concept of genetics that includes not only genes, their proteins, and associations with diseases but also the interaction among susceptibility factors and environmental factors and the potential for multiple genes, proteins, and environmental factors to influence health and well-being (1mark)
_____ the study of the impact of an individual's genetic variants on their metabolic and physiologic function (i.e., on such parameters as level of nutrients required, ability to digest and absorb food, susceptibility to various diseases) (1mark)
_____ nutrients and other food components that convey information to the genetic material and effect a change in gene expression, such as by serving as ligands for signal transduction or for transcription control of gene expression (1mark)
_____ is the study of the impact of the environment on genes and their protein products, of how bioactive food components trigger changes in gene expression in response to the environment in which the organism lives. (1mark)
_____ the science of inheritance, has focused on identifying the mechanisms by which traits are passed from parent to child, focusing on eye color and other readily observable characteristics. (1mark)
7. Write on the issues surrounding genetically modified foods (5marks)



9. Write short notes on the controversy of fetal origin of adult diseases (FOAD) hypothesis (5marks)
10. List 10 chronic diseases associated with FOAD (5marks)
11. Mention 5 methods of measuring body fat composition. (5marks)
12. Give an advantage and a disadvantage for each of the methods of measuring body fat composition mentioned above. (5marks)
13. Discuss briefly the role of micronutrients in immunity (5marks)
14. Associate the following issues to the relevant principles of the Right to Adequate Food?
- i.) The right to adequate food must be guaranteed to everyone, independent of their social origin, gender, language, etc.
 - ii.) People must be able to contribute to the development of programmes and policies.
 - iii.) The individual is a holder of human rights and must be treated with respect.
 - iv.) The state has legal obligations to act for development and is responsible for its action.
 - v.) The individuals need to have the power and capacity to claim their human rights.
- A:** Human dignity. **B:** Accountability. **C:** Empowerment. **D:** Non-discrimination.
E: Participation.

2. In institutional food preparation, why must you as a nutritionist or food handler consider the microbial aspect as important? (5marks)
3. Distinguish between a late meal and main meal (5marks)
4. Food preparation involves spectrum of events irrespective of ethnicity or culture. In this context, discuss the various steps of food preparation. (5 marks)
5. Mention one major objective of food service management in each of the following institutions: Boarding school; Orphanage; Remind home; Military; Prison/correctional service (5 marks)
6. As an expert in food institution industry, identify the basic principle of baking. (5 marks)
7. How will you describe food specification to a group of pupils in secondary school? (5 marks)
8. You have just been employed in an hospital to develop food service unit, what will be your areas of emphasis to ensure a daily success (5 marks)
9. Meal planning is very important in the process of food preparation describe five action steps to take in institutional meal planning (5marks)
10. In your voluntary work to the community, you have decided to carry out food demonstration for a disappearing dish, what step will you take to ensure successful outing. (5 mark)
11. Discuss the various ways of improving traditional dishes in Nigeria (5 marks)
12. Outline the benefits of food demonstration (5 marks)
13. In your past exposure to food preparation laboratories and kitchen, mention some safety procedures in handling equipment and utensils during food preparation. (5 marks)
14. Explain the terms in relation to institutional foods 'cycle menu' and 'menu capacity'. (5marks)