



ELIZADE UNIVERSITY

ILARA-MOKIN

ONDO STATE

FACULTY: Basic and Applied Sciences
DEPARTMENT: Physical and Chemical Sciences
FIRST SEMESTER EXAMINATIONS
2016/2017 ACADEMIC SESSION

COURSE CODE: BCH 301

COURSE TITLE: Nutritional Biochemistry

DURATION: 2 ½ hours

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HOD's SIGNATURE

TOTAL MARKS: 60

Matriculation Number: _____

INSTRUCTIONS:

1. Write your matriculation number in the space provided above and also on the cover page of the exam booklet.
2. This question paper consists of 1 page.
3. Answer all questions in the exam booklet provided.
4. Attempt any (4) of the six (6) questions

- (1a) Describe 4 ways by which energy is expended.
- (1b) Calculate the energy available from a meal consisting of 1 slice of bread, 1 table spoon of peanut butter that contains 16grams of carbohydrate, 7g of protein and 9 gram of fat.
What is the percentage calories of each of the energy nutrient?.
- (1c) What do you understand by the biological value of protein?
- (2a) Describe the Kjeldahl method of crude protein determination in biological food samples.
- (2b) List 4 other methods of protein determination.
- (2c) List 3 functions of vitamin E.
- (3a) Write short notes on the following:
- (i) Dry ashing.
 - (ii) Wet ashing.
 - (iii) Batch solvent extraction.
- (3b) Discuss three (3) functions of carbohydrates.
- (4ai) Describe any three (3) nutritional disorders you are familiar with
- (4aii) How can these disorders be prevented and what therapeutic strategy will you recommend to treat them.
- (4b) Briefly comment on the occurrence of the listed pathogens in food;
- (i) Salmonella
 - (ii) Tapeworm
- (5a) In a tabular form state the functions, deficiency and sources of Vitamins A, B, C, D and E
- (5b) Describe any five (5) methods of preserving food
- (6a) What is Food poisoning
- (6b) Describe how Food additives and Oncogenes can lead to food poisoning.