LEAD CITY UNIVERSITY, IBADAN
Faculty of Sciences
Department of Biochemistry

COURSE PARTICULARS

Course code: Experimental Biochemistry
Course title: BCH 213
No. of Units:
Status: compulsory/elective

LECTURER DETAILS

Name: Prof. Omole, J.O
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Name: Mrs. Hassan
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COURSE DESCRIPTION

Nutrients in Foods: Qualitative tests for carbohydrates, protein, lipids; Quantitive determinations on Carbohydrates, Protein and Lipids and Dietary Fibres.

COURSE OBJECTIVES

To acquaint students with use of laboratory and to introduce students to some aspects of nutritional biochemistry through experiments.

ASSESMENT

Class Attendance	5marks
Test(s) and Assignments	25marks
Final Examination	70marks

LECTURE PLAN

Week	Topic
Week 1	General test for carbohydrates
Week 2	Test for reducing sugars and non reducing sugars
Week 3	Determination of reducing sugars in blood and beverages
Week 4	Behavior of starch with iodine and alkaline solutions
Week 5	Hydrolysis of starch, fermentation of sugar in alcohol production
Week 6	Tests for protein; solubility of proteins; precipitation of proteins
Week 7	Iso- electric point determination in proteins; amylase activity in saliva
Week 8	Amino acids in proteins and their identification
Week 9	Test for fats and oils; solubility of lipids in different solvents
Week 10	saponification of oils; saponification number determination
Week 11	Iodine number determination
Week 12	Dietary fibre determination in foods

READING LIST

1. The chemical analysis of ffods by David Pearson (1976)
2. Churchill Livingstone, 6th edition

TUTORIAL QUESTIONS

1. Distinguish between samples A and B using the reagents provided

2. Determine the reducing sugar content of sample C using the reagents provided

3 (a).Determine the iso –electric poit of sample D using the reagents provided

(b) Define the iso-electric point of a protein and its significance