

OLABISI ONABANJO UNIVERSITY
CENTRE FOR SANDWICH PROGRAMMES
DEPARTMENT OF BIOCHEMISTRY
REMO CAMPUS, IKENNE.

2011/2012 HARMATTAN SEMESTER EXAMINATION DATE: 7th SEPT., 2012

COURSE CODE: BCH 303

COURSE TITLE: METABOLISM OF LIPIDS

TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS

1. a) Write short notes on the classification of lipids.
b) What are essential fatty acids? Give two examples.
2. a) Describe the β -oxidation of Lauric acid, a 12-C fatty acid $\text{CH}_3(\text{CH}_2)_{10}\text{COOH}$
b) How much energy is produced after the complete oxidation of the fatty acid?
3. a) Define the following terms;
 - i. Miscelles
 - ii. Liposomes
 - iii. Amphipatic compounds
 - iv. Saturated fatty acidsb) What are functions of lipoproteins?
4. Write on the biosynthesis of Palmitic acid, a 16-C fatty acid.
5. a) Write short notes on the biosynthesis of ketone bodies in the liver.
b) Differentiate between the following pairs:
 - i. Ketonuria and Ketonemia
 - ii. Low density lipoproteins and High density lipoproteins

