

OLABISI
DEPARTMENT OF BIOCHEMISTRY
REMO CAMPUS, IKENNE
2009/2010 HARMATTAN SEMESTER EXAMINATION

COURSE CODE: BCH 303

DATE: MARCH 17TH 2010

COURSE TITLE: LIPID METABOLISM

TIME: 2 HOURS

INSTRUCTION: ANSWER ANY FOUR QUESTIONS.

1 (a) Describe the different kinds of lipids and include a nomenclature and classification of fatty acids.

(b) Write the structure of 1-linoleyl-2-oleyl phosphatidylethanolamine.

2 (a) Describe oxidation of even chain saturated fatty acid.

(b) Differentiate between β -oxidation and fatty acid biosynthesis

3 (a) Describe the cholesterol biosynthesis starting with acetyl CoA as precursor.

(b) Explain how cholesterol biosynthesis is regulated.

4 (a) Describe the reaction sequence in fatty acid synthesis.

(b) Write the stoichiometry of palmitate synthesis.

5 Write short note on the following:

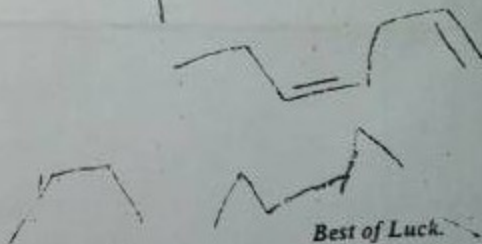
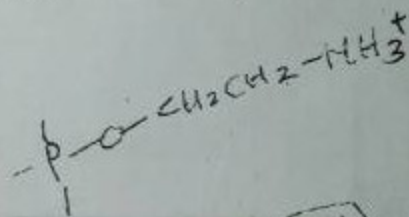
(a) Lipoprotein.

(b) Essential fatty acids.

(c) Ketone bodies and ketosis.

(d) Atherosclerosis.

(e) Sphingolipids.



Best of Luck.