

UNIVERSITY OF BAMENDA

FACULTY OF SCIENCE

FIRST SEMESTER CONTINUOUS ASSESSMENT FOR 2011/2012 SESSION

DEPARTMENT: Life Sciences

COURSE CODE: BIO 201

DATE: 14/05/2012

DURATION: 9:00-11:00



COURSE INSTRUCTORS: Salah, Neba

COURSE TITLE: Cell Biology

TIME ALLOWED: 2 Hours

INSTRUCTIONS: *Answer all the two Questions*

(1) Membranes are important structural features of cells.

(a) Describe how membrane structure is related to the transport of materials across a membrane. (10 Mks)

(b) Describe the role of membranes in the synthesis of ATP in cellular respiration and photosynthesis. (10 Mks)

(2) A portion of a specific DNA molecule consists of the following sequence of nucleotide triplets:

TAC GAA CTT CGG TCC

This DNA sequence codes for the following short polypeptide:

methionine - leucine - glutamic acid - proline - arginine

(a) Describe the steps in the synthesis of this polypeptide. (6 Mks)

(b) What would be the effect of a deletion or an addition in one of the DNA nucleotides? (2 Mks)

(b) What would be the effect of a substitution in one of the nucleotides? (2 Mks)

Total : 30 Marks
Good Luck