



OFFICE OF THE DEPUTY VICE CHANCELLOR- ACADEMICS AND STUDENTS AFFAIRS

## UNIVERSITY EXAMINATIONS 2020/2021 ACADEMIC YEAR

## THIRD YEAR SECOND SEMESTER REGULAR EXAMINATION FOR

DEGREE IN BACHELOR OF SCIENCE IN BIOCHEMISTRY

**COURSE CODE: BIO 211** 

COURSE TITLE: GENERAL BIOCHEMISTRY

DATE: 16/4/2021

TIME: 2.00 PM-5.00 PM

## INSTRUCTIONS TO CANDIDATES

- Answer ALL Questions in section A and ANY OTHER TWO in SECTION B
- Do not write on the question paper
- Marks are shown at the end of each question
- Show workings in the answer booklet for award of full marks
- Mobile phones are not allowed in the examination venue
- Each question should begin on a fresh page
- Duration is 2.30 hours

THIS PAPER CONSISTS (3) PRINTED PAGES

PLEASE TURN OVER

2020/2021 ACADEMIC YEAR

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COURSE TITLE: GENERAL BIOCHEMISTRY

**DURATION:** 

3 HOURS

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Answer ALL questions in section A and ANY OTHER TWO in section B.

Section A (40 Marks)

**QUESTION ONE** 

List the major roles of lipids in cells.

(3 mks)

**QUESTION TWO** 

What are cytoplasmic inclusions?

(3 mks)

**QUESTION THREE** 

What chemical substances compose the plasma membrane?

(6 mks)

**OUESTION FOUR** 

Describe any three trace elements and their importance.

(9 mks)

**OUESTION FIVE.** 

Using a well sketched diagram, classify neurons.

(9 mks)

**OUESTION SIX.** 

Describe the structure of the Red Blood Cell's cell membrane.

(10 mks)

Section B (30 Marks)

**OUESTION SEVEN.** 

Discuss the light phase of photosynthesis.

(15 mks)

**QUESTION EIGHT.** 

Elucidate the structure and function of the endomembrane system.

(15 mks)

**OUESTION NINE.** 

Discuss the nitrogen cycle.

(15 mks)