



**ELIZADE UNIVERSITY,
ILARA-MOKIN, NIGERIA**

FACULTY: BASIC & APPLIED SCIENCES

DEPARTMENT: BIOLOGICAL SCIENCES

FIRST SEMESTER EXAMINATION

2020/2021 ACADEMIC SESSION

COURSE CODE: MCB 309

**COURSE TITLE: MICROBIAL PHYSIOLOGY AND
METABOLISM**

COURSE UNIT: 2 UNITS

HOD's SIGNATURE

DURATION: 2 HOURS

NAME:.....

MAT. No:.....

INSTRUCTION: ANSWER ANY THREE (3) QUESTIONS

1. a.) Explain the mechanism of transport in microbial cells.

b.) With an example, discuss primary active transport.

20 Marks

2. a.) Explain the term glycolysis

b.) With the aid of an annotated diagram, explain Krebs cycle.

20 Marks

3. a.) Discuss respiration in microorganisms.

b.) What are chemoorganoheterotrophs?

20 Marks

4. a.) List the pathways that microorganisms degrade sugars to pyruvate.

b.) Briefly explain fermentation in microbes.

20 Marks

5. a.) Explain nutrition requirements in microbes

b.) What are growth factors? List the classes of growth factors you know.

20 Marks