



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

**BASIC & APPLIED SCIENCES
BIOLOGICAL SCIENCES
FIRST SEMESTER EXAMINATION
2019/2020 ACADEMIC SESSION**

COURSE CODE: EMT 513

COURSE TITLE: ENVIRONMENTAL BIOTECHNOLOGY

DURATION: 2 HOURS

Leah Oso

NAME:.....MAT. No:.....

INSTRUCTION

Answer any FOUR questions.

QUESTIONS

1. a) Explain biosurfactants, and give examples.
b) Outline the physiological roles of biosurfactants.
c) Give two applications of biosurfactant in bioremediation.
(15 Marks)
2. a) Why are plastic non-biodegradable?
b) Discuss the impact of plastics on the environment, animals and human.
c) Explain briefly co-processing of plastics.
(15 Marks)
3. a) Describe the process involve in the biosorption of metals by cells.
b) Differentiate between bioaccumulation and biomagnification.
c) What are hyperaccumulators? Gives examples of plants that are hyperaccumulators of metals.
(15 Marks)
4. a) What is an industrial wastewater?
b) Explain the benefits of waste water treatment.
c) Discuss bioremediation technology.
(15 Marks)
5. a) List the various methods you can use to treat wastewater.
b) Identify the major players in a wastewater treatment process.
c) With an annotated diagram describe the process of wastewater treatment.
(15 Marks)
6. a) Write concisely on biofertiliser inoculation.
b) Discuss in details why you will consider biofertilisers as against synthetic fertiliser.
c) List the 3 types of biofertilisers, and discuss on one of them.
(15 Marks)