



Damietta University  
Faculty of Sciences  
Environ. Sc. Dept.  
4<sup>th</sup> year Env. Sc. & Env. Sc.  
& Chem Students



Course: Environ. Biotechnology  
Code: (409 E)  
Date: 10/1/2024  
Time: 2 hours  
Full Mark: 70 Marks

**Answer All the following Questions**

**Question 1: (15 Marks)**

**Explain the following:**

- a. Application of biotechnology
- b. Degree of toxicity can vary
- c. Environmental and economic benefits contribute to development of sustainable society.

**Question 2: (20 Marks)**

**a. Complete the following.**

..... is the process in which harmful chemicals builds up inside a living organism, while, ..... is a process used to ..... by using ....., which can be use of ..... in manufacturing, microorganisms to degrade ..... or ....., monoclonal antibodies to .....

**b. Which of the following is not a reason behind air pollution?**

- 1) Industrialization
- 2) Auto exhaustion
- 3) Deforestation
- 4) Afforestation

**c. Which of the chemicals may accumulated in an organism during bio-accumulation process**

- a) Pesticides
- b) Sodium
- c) Potassium
- d) Fe

**d. What is the following process is not included in the bio accumulation**

- a) Stockpiling
- b) Elimination
- c) Filtration
- d) Uptake

**e. Which of the following method of disposal of solid waste leads to release of organic pollutants.**

- a) Incineration
- b) Phytoremediation
- c) Biological treatment
- d) Land filling

**Good Luck**

**Examiners: Prof. Maie ElGammal**