



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

**BASIC & APPLIED SCIENCES  
BIOLOGICAL SCIENCES  
SECOND SEMESTER EXAMINATION  
2020/2021 ACADEMIC SESSION**

**COURSE CODE: BTH 418**

**COURSE TITLE: BIORESOURCES MANAGEMENT**

**DURATION: 2 HOURS**

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

**INSTRUCTION**

**Answer any FOUR questions.**

## QUESTIONS

1. a. Using a diagram, illustrate the general anatomy of a grain.  
b. Write short note on the following:
  - i) Hilum
  - ii) Lemma
  - iii) Scutellum
  - iv) Chaff
  - v) Cotyledon  
c. State the difference between cereal and legume.  
[15 Marks]
2. a. Explain the difference between biodiversity hotspot and coldspot.  
b. Enumerate five (5) biodiversity hotspots in Africa and associated highland  
c. Enumerate criteria for designating Key Biodiversity Areas.  
[15 Marks]
3. a. i) What is a seed vault? ii) List the importance of seed vaults?  
b. Write concise note on the following:
  - i) Cryobank
  - ii) Tissue bank
  - iii) DNA bank  
c. Distinguish between in-situ and ex-situ conservation of genetic resources.  
[15 Marks]
4. a. Write explanatory note on the following:
  - i) Germplasm
  - ii) Core collection
  - iii) Genetic erosion  
b. Differentiate between resistance and tolerance.  
c. i) Explain breeding for resistance, i) How do you produce plants that are resistant to disease?  
[15 Marks]
5. a. What is sustainable development?  
b. Outline the principal threat to biodiversity.  
c. i) What are invasive species? ii) How are invasive introduced to new areas?  
[15 Marks]
6. a. What is tree biotechnology? ii) Briefly explain techniques used in tree biotechnology.  
b. Outline the risk and benefit of tree biotechnology.  
c. Differentiate between autopolyploid and tetrapolyploid.  
[15 Marks]