

NATIONAL OPEN UNIVERSITY OF NIGERIA 14-16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS SCHOOL OF SCIENCE AND TECHNOLOGY JANUARY/FEBRUARY 2013 EXAMINATION

COURSE TITLE: BIORESOURCES MANAGEMENT COURSE CODE:

AGB 404

CREDIT UNIT: 3 TIME: 2 ½ HOURS INSTRUCTION: ANSWER ANY FIVE QUESTIONS

1 (a). What is biodiversity and what levels of biodiversity can you identify?
7marks

- (b). What do you know about the historical perspective of biodiversity? 5marks
- (c). How would you define the ecosystem? 3marks
- (d). What are the characteristics of the ecosystem?

 5marks
- 2. (a). Nigeria is endowed with a large variety of plant and animal species occurring in different numbers under different vegetations, which help sustain rural economy. List three species of cereals, legumes and fruit trees each under the following headings:
- i). Botanical/Scientific name ii). Common/English name iii). Local name 12marks
 - (b). Discuss three types of biodiversity that you know 8marks
- 3 (a). What are the uses of biodiversity?
 - (b). Distinguishing between gene pool and genetic erosion.

(c). Discuss the causes of genetic erosion.

4. (a). Discuss the benefits of plant biotechnology

15 marks

14marks

- (b). Why does genetic erosion occur in:
 - (i). Animal species
 - (ii) Plant species

5marks

5. (a). Loss of biodiversity offers grave consequences, which may require prolonged seasons of correction. How will you manage it?

10marks

(c). Discuss the obstacles to the effective use of germplasm. 10marks

- 6. Discuss the application of biotechnology in:
 - (i). Crop production

7marks

(ii). Forestry

13marks

7 (a). What is germplasm appropriation?

3marks

(b). List 6 conservation agencies set up by Nigerian government to manage natural resources.

3marks

(c). Distinguish between very clearly bio-prospecting and bio-resource legislation.

4marks

(d). Discuss bio-resource legislation in Nigeria.

5marks

(e). List 10 indirect causes of genetic erosion in Nigeria. 5marks