

NATIONAL OPEN UNIVERSITY OF NIGERIA PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA FACULTY OF SCIENCE

Department of Pure and Applied Sciences

June 2021 Examination

BIO 308 - Biogeography

Time: 2hours Credit Unit: 2

Instruction: Answer Question One (1) and any other THREE (3) Questions

- 1. (a) State the contributions of the following to the study of biogeography
 - (i) Alfred Russel Wallace (3 marks)
 - (ii) Robert MacArthur and E. O. Wilson in 1967 (3 marks)
 - (iii) Edward O. Wilson (4 marks)
 - (b) Explain the various modifications that have taken place in Island Biogeography **7marks**
 - (c) Give a concise description of the following zoogeographical provinces:
 - (i) Neotropical province (ii) Ethiopian province (iii) oriental province. 8marks
- 2. (a) Explain the distribution of organisms in the following subkingdoms of Palaeotropical kingdom:
 - (i) African sub-kingdom (3 marks)
 - (ii) Madagascan sub-kingdom (3 marks)
 - (iii) Indo-Malesian subkingdom (3 marks)
- 2 (b) Describe the phytogeography of the following circumboreal provinces:
 - (i) Floristic province (ii) Artic province (iii) Atlantic province. 6marks
- 3. (a) Give **Five (5)** examples of mammals of the Australian region. (5marks)
 - (b) Explain the following means of dispersal of plants:

Wind dispersal

Water dispersal

Gravity dispersal (10marks)

- 4 a Describe the features of Anaconda as a tropical animal (4 marks)
 - b. Describe the Neotropical Kingdom. (11 marks)
- 5 (a) Write concise notes on the following:
 - (i) South Atlantic Corridor (3 marks) (II) Lemuria (2 marks)
 - (b) Explain the distribution of plants in Californian floristic province 10 marks