



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE
2025_1 EXAMINATION...

COURSE CODE: EHS517

COURSE TITLE: BIOMETEOROLOGY

COURSE UNITS: 2 CREDIT UNITS

TIME ALLOWED: 1 ½ HOURS

TOTAL SCORE: 70 MARKS

INSTRUCTION: ANSWER ALL QUESTIONS

- 1 (a) Highlight how the Babylonians, Egyptians, Chinese, and Greeks contributed to the early foundations of biometeorology **2 marks**
- (b)i. In what ways can global climate change influence the frequency and intensity of weather disasters **4 marks**
- ii. Explain how biometeorology can contribute to mitigating impacts on human health? **4 marks**
- (c)i. Describe how extreme heat and cold weather variations affect mortality rates in different populations, stating the factors that make certain groups more vulnerable **7 marks**
- ii Explain the mitigation strategies for the vulnerable population exposed to extreme heat and cold weather variations **3 marks**
- 2 (a) Explain how the responses of plants, integrate to affect overall plant growth and gas exchange? **5 marks**
- (b)i. Define Environmental physiology **3 marks**
- ii. Explain how environmental physiology contribute to agriculture **3 marks**
- (c) Highlight three (3) general characteristics studied in Environmental physiology **3 marks**
- (e)i Define altitude and state its classification **5 marks**
- ii. Highlight the health implications of altitude **4 marks**
- iii Highlight the implications of altitude for aviation **2 marks**
- 3 (a) List five (5) Meteorological elements with their methods of measurement and units **10 marks**
- (b) State the components of solar radiation that affect life on Earth **3 marks**
- (c) Explain the significance of humidity in the atmosphere for living organisms **3 marks**
- Organisms
- (d) Highlight the primary focus of the study of biometeorology **2 marks**
- (e) List the three indices of disease measurement with an example each **3 marks**
- (f) i. Explain the steps involved in establishing a causal relationship between a factor and a disease **3 marks**
- ii. State the importance of eliminating bias and confounding **1 mark**