



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SCIENCES
DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
2024_2 EXAMINATION

COURSE CODE: ESM 411

COURSE TITLE: POPULATION, ENVIRONMENT AND DEVELOPMENT

CREDIT: 2 UNITS

TIME ALLOWED: 2½ HOURS

Instructions: 1. Attempt question Number one (1) and any other (2)

2. Question Number 1 is compulsory and carries 30 marks, while other questions carry equal marks of 20 each

3. Present all your points in coherent and orderly manner

1a. Evaluate the role of environmental education in promoting social change and sustainability.

1b. Discuss three (3) potential challenges in integrating environmental education.

1c. Examine the relationship between population dynamics and environmental sustainability.

1d. List three (3) impact of population growth on ecosystem health.

1e. List three (3) types of land use.

1f. List three (3) challenges of improper land uses.

2a. Discuss sustainable population management.

2b. Outline three (3) of sustainable population management strategies.

2c. List three (3) challenges of implementing sustainable population management strategies in Nigeria.

3a. Describe the key factors that led to the transition from hunting and gathering to agriculture.

3b. Outline (3) three challenges of the transition described in 1a.

3c. Discuss how the shift to agriculture influenced developments in early human societies.

4a. Analyze how the establishment of settled agricultural communities led to development of complex civilizations.

4b. Discuss three (3) technological innovations employed by ancient civilizations to adapt to environmental constraints.

4c. Define soil degradation.

5a. What are natural disasters?

5b. Outline three (3) contemporary disasters experienced by civilizations.

5c. Explore three (3) responses of civilizations to natural disasters such as floods and droughts.