



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS**  
**MARCH/APRIL 2016 EXAMINATION**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**COURSE CODE:** ESM431  
**COURSE TITLE:** Environmental Health and Safety

**TIME:** 2 hours **COURSE UNIT:** 2 units

**INSTRUCTION:** Answer question 1 (COMPULSORY) and any other three questions.

- (1)
  - (a) Define “accident” according to International Labour Organization (ILO) and World Health Organization (WHO). (3 marks)
  - (b) List four principles of accident prevention. (4 marks)
  - (c) Discuss the costs of industrial accidents. (8 marks)
  - (d) List five advantages of SEA. (5 marks)
  - (f) List five problem areas in SEA. (5 marks)
  
- (2)
  - (a) Define Strategic Environmental Assessment (SEA) as stated by Therivel (2004). (2 marks)
  - (b) What are the two procedures involved in SEA? (3 marks)
  - (c) List eight Category one (1) projects that require a mandatory EIA in Nigeria. (4 marks)
  - (d) Define environmental impact assessment as stated by Wathern (1988). (2 marks)
  - (e) Enumerate eight processes of Environmental Impact Assessment (EIA) in Nigeria. (4 marks)
  
- (3)
  - (a) Give the full meaning of the following acronyms:
    - (i) EEC (1 mark)
    - (ii) NESREA (1 mark)
    - (iii) HFC (1 mark)
    - (iv) VOC (1 mark)
    - (v) OGEPA (1 mark)
    - (vi) LPG (1 mark)
  - (b) List four benefits of occupational health and safety audits. (4 marks)
  - (c) Mention five reasons for scheduling a pre-audit meeting before actual audit. (5 marks)
  
- (4)
  - (a) Define the following terms:
    - (i) Clean technology (1½ marks)

- (ii) Cleaner technology (1½ marks)
  - (iii) Cleaner production (1½ marks)
  - (iv) Cleaner products (1½ marks)
  - (b) List four barriers to organisational commitment in implementation of clean technology. (4 marks)
  - (c) List five uses of clean technology in Environmental Management System (EMS). (5 marks)
- (5) Explain the negative impact of man's activities through the following factors:
- (i) Global warming (3 marks)
  - (ii) Climate change (3 marks)
  - (iii) Food webs (3 marks)
  - (iv) Waste recycling and disposal (3 marks)
  - (v) Fresh water (3 marks)
- (6) (a) List six benefits of environmental audit. (3 marks)
- (b) Mention six important information which an audit report should contain. (3 marks)
- (c) Write short notes on the following classes of environmental audit:
- (i) Liability audit (3 marks)
  - (ii) Activity audit (3 marks)
  - (iii) Managerial environmental audit (3 marks)