



**NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SEPTEMBER/OCTOBER 2015 EXAMINATION**

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: ESM 431
COURSE TITLE: Environmental Health and Safety

COURSE UNIT: 2 units

TIME: 2 hours

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

- (1) (a) 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)
- (b) Define environmental impact assessment as stated by Wathern (1988). (2 marks)
- (c) Enumerate eight processes of Environmental Impact Assessment (EIA) in Nigeria. (4 marks)
- (d) List eight Category one (1) projects that require a mandatory EIA in Nigeria. (4 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 five advantages of SEA. (5 marks)
- (d) List five problem areas in SEA. (5 marks)
- (3) (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)
- (4) (a) Define accident according to International Labour Organization (ILO) and World Health Organization (WHO). (3 marks)
- (b) Discuss the costs of industrial accidents. (8 marks)
- (c) List four principles of accident prevention. (4 marks)
- (5) (a) Give the full meaning of the following acronyms:
- (i) NESREA
 - (ii) VOC
 - (iii) EEC
 - (iv) OGEPA
 - (v) LPG
 - (vi) HFC
- (6 marks)
- (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)
- (6) (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 five uses of clean technology in Environmental Management System (EMS). (5 marks)
- (c) List four barriers to organisational commitment in implementation of clean technology. (4 marks)