



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF

ENVIRONMENTAL PLANNING AND MANAGEMENT

EPM 522: ENVIRONMENTAL IMPACT ASSESSMENT

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DATE: FRIDAY 9TH APRIL 2010

TIME: 2.00 P.M. – 5.00 P.M.

INSTRUCTIONS

- Answer Question 1 and any other two.
- Suitable diagrams should be used wherever they serve to illustrate an answer.

Q.1 Discuss the Nature and Functions of the following Environmental Management Tools, indicating their entry points in the Project Cycle:

- a) Strategic Environmental Assessment (SEA) (10 marks)
- b) Environmental Impact Assessment (EIA) (10 marks)
- c) Environmental Audit (EA) (10 marks)

Q.2 a) Explain what you understand by the concept "environment" and "Impact Assessment" as applied in EIA. (10 marks)

b) With reference to suitable illustrations, explain how the following factors operate either singly or in combination to determine the decision-making process in EIA:

- i) Profit-making Values
- ii) Public Interest Values
- iii) Socially-Rooted Values
- iv) Ecologically-Rooted Values (10 marks)

- Q.3 Write an illustrated essay on the following methods as applied in Environmental Impact Assessment:
- a) Checklist (7 marks)
 - b) Matrix Analysis (7 marks)
 - c) Network analysis (6 marks)
- Q.4 Section 13 of Environmental Management and Coordination Act (1999) is essential for enforcing the provisions of the Act as it defines Environmental Offences and the Penalties in respect to such offences. In view of this, discuss environmental offences and the penalties relating to:
- a) Pollution (5 marks)
 - b) Environmental; Impact Assessment (5 marks)
 - c) Environmental Inspection (10 marks)
- Q.5
- a) With reference to either forest or Wetland Ecosystems, Explain what you understand by "Total Economic Value" (TEV) of environmental systems. (8 marks)
 - b) Discuss how Cost-Benefit analysis (CBA) could be used as a tool for environmental diagnosis and public sector investment appraisal. (12 marks)