



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING BANKING AND FINANCE

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL RESOURCE CONSERVATION.

ERC 405: ENVIRONMENTAL RESOURCE ACCOUNTING.

DATE: 16/12/2021

TIME: 8.30-10.30 AM

INSTRUCTIONS

Answer question ONE and any other TWO questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain the following types of environmental accounting; (6 marks)
- (i) Environmental financial accounting.
 - (ii) Environmental cost accounting.
 - (iii) Ecological accounting.
- b) Explain the following types of environmental liabilities. (6 marks)
- (i) Compliance obligations.
 - (ii) Remediation obligations.
 - (iii) Compensation obligations.
 - (iv) Fines and penalties.
- c) Distinguish between SEEA central framework and the system of National Accounts with respect to:-
- (i) Physical flows and monetary flows (4 marks)
 - (ii) Stocks and flows of assets (4 marks)
- d) One of the most important features of the SEEA Central framework is its capacity to organize physical and monetary data with common scope, definitions and classifications into combined presentations, whereby the structure of combined presentations depends on the topic of measurement. State four common features and benefits of these combinations (4 marks)
- e) Explain what the physical and hybrid accounts are and state the four different types of flows that are recorded in these accounts. (6 marks)

QUESTION TWO (20 MARKS)

- a) Explain the following terminologies as used in environmental accounting giving examples in each case. (8 marks)
- (i) Environmental liability
 - (ii) Environmental assets
 - (iii) Natural assets
 - (iv) Environmental expenditure
- b) The SEEA-2003 contained an extended examination of the accounting for non-renewable resources particularly mineral and energy resources including a discussion on the allocation of resource rent between depletion and a return on environmental assets. How has SEEA concluded as treatment in each of the following relevant areas:-
- (i) Resource rent
 - (ii) Costs of mineral exploration
 - (iii) Economic value of mineral and energy resources
 - (iv) Additions to the stock of natural resources (4 marks)
- c) Identify and explain four users of corporate environmental information and identify the specific needs of each user (8 marks)

QUESTION THREE (20 MARKS)

- a) When preparing environmental resources accounts, it is always important to follow the stipulated accounting principles. Explain any four of these principles. (8 marks)
- b) A good environmental report must possess qualitative attributes that make accounting information useful. State and explain any of the four characteristics. (8 marks)
- c) Under the framework of environmental reporting, reporting has been presented by various companies across the world using diverse patterns. With respect to this, there are proposed elements of a complete documentation, such as environmental policy and management system, accounting for material use and management of wastes. State any four issues included in these two areas. (4 marks)

QUESTION FOUR (20 MARKS)

Discuss the salient features of the four accounts in the integrated framework for environmental activity accounts. The discussion should be limited to the scope, variables, valuation rules and classifications for each.

- a) Environmental goods and services sector (EGSS)
- b) Environmental protection expenditure (EPEA)
- c) Resource management expenditure account (REMEA)
- d) Environmental subsidies and other transfers account (ESST)

QUESTION FIVE (20 MARKS)

- a) Explain how the environmental functions can contribute in enhancement of livelihoods (6 marks)
- b) Define the following terms (5 marks)
 - (i) Economic unit
 - (ii) Ecosystem accounting unit
 - (iii) Land cover/ecosystem unit
 - (iv) Land cover/ecosystem functional unit
 - (v) Ecosystem asset
 - (vi) Environmental Asset
- c) Explain the concept behind recognition and measurement of environmental liabilities with respect to environmental resources accounting. (4 marks)
- d) Briefly explain any 5 purposes for which environmental accounts can be used in Kenya (5 marks)