



OFFICE OF THE DEPUTY PRINCIPAL  
ACADEMICS, STUDENT AFFAIRS AND RESEARCH

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## UNIVERSITY EXAMINATIONS

### 2020 /2021 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER MAIN EXAMINATION

**FOR THE DEGREE OF BACHELOR OF  
EDUCATION SCIENCE**

**COURSE CODE: ESB 412**

**COURSE TITLE: CONSERVATION, MANAGEMENT OF  
NATURAL RESOURCES AND ETHNOLOGY**

**DATE: 16<sup>TH</sup> JULY, 2021**

**TIME: 08.00 AM – 11.00 AM**

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### INSTRUCTIONS TO CANDIDATES

- SEE INSIDE

**THIS PAPER CONSISTS OF 3 PRINTED PAGES**

**PLEASE TURN OVER**

**REGULAR – MAIN EXAM**

**ESB 412: CONSERVATION, MANAGEMENT OF NATURAL RESOURCES AND  
ETHOLOGY**

**STREAM: BED (SCIENCE)**

**DURATION: 3 Hours**

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**INSTRUCTIONS TO CANDIDATES**

- i. Answer **ALL** questions from section A and any **THREE** from section B.
  - ii. Diagrams should be used whenever they serve to illustrate the answer.
  - iii. Do not write on the question paper.
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**SECTION A (24 MARKS)**

**Question One**

- a) Differentiate between climate and weather. (2 Marks)
- b) Explain any three elements of air photo interpretation. (6 Marks)
- c) Give an account of any four problems that would arise as a result of not conserving plant genetic resources. (4 Marks)

**Question Two**

- a) Explain three reasons why governments would adopt *in situ* conservation of plant genetic resources of *ex situ* approach. (6 Marks)
- b) Explain the concept sustainable development and show its relevance to a developing country like Kenya. (4 Marks)
- c) Justify the main reason why governments need to manage natural resources. (2 Marks)

**SECTION B (36 MARKS)**

**Question Three**

- a) Give an account of the relationship between of resources and economic development. (6 Marks)
- b) Explain how ecological succession can affect the existence of wild life in their natural environments. (3 Marks)
- c) Explain any two approaches that can be used to control wild life damage on forest crops. (3 Marks)

**Question Four**

- a) Discuss the tile concept of weak sustainability and show its validity in natural resource management. (8 Marks)
- b) Explain the impact of small animals on forest ecology. (4 Marks)

**Question Five**

- a) Define a disease. (2 Marks)
- b) Explain any five wildlife diseases, animals infected and identify the possible control methods. (10 Marks)

**Question Six**

- a) Discuss any four beneficial effects of forestry practices on wild life. (8 Marks)
- b) Relate ecological succession to the management of forest resources. (4 Marks)

**Question Seven**

- a) Differentiate between biological resources and non-renewable resources. (2 Marks)
- b) Discuss the characteristics of renewable natural resources. (10 Marks)

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