



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering and Technology

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

CERTIFICATE IN ELECTRICAL POWER ENGINEERING

208 EEP 21

SOCIAL & ENVIRONMENTAL STUDIES

END OF SEMESTER TWO EXAMINATIONS

SERIES: FEBRUARY 2011 SERIES

TIME: 2 HOURS

Instructions to Candidates:

Answer Question **ONE**(**COMPULSORY**) and any other **TWO** Questions.

(COMPULSORY)

Question ONE

- a) i) Briefly explain how atomic energy is produced. (3 marks)
ii) State any TWO disadvantages of atomic energy. (2 marks)
- b) i) Define the term recycling. (1 mark)
ii) State any TWO recyclable materials. (1 mark)
iii) State the FOUR requirements to be met for recycling. (4 marks)
iv) State any TWO importance of recycling. (2 marks)
- c) i) Define the term waste. (1 mark)
ii) State any TWO types of wastes. (1 mark)
iii) Explain any TWO methods that can be used to dispose off wastes. (4 marks)
iv) Draw the waste hierarchy. (4 marks)
- d) i) State FOUR reasons why we need to manage and conserve the environment. (4mks)
ii) List any THREE environmental hazards. (3 marks)

(ANSWER ANY OTHER TWO QUESTIONS)

Question TWO

- a) i) Define the term pollution. (2 marks)
ii) State any THREE forms of pollution. (3 marks)
- b) i) Explain any TWO sources of air pollution. (4 marks)
ii) State any THREE effects of air pollution. (3 marks)
iii) State any FOUR measures that can be taken to curb pollution. (4 marks)
- c) i) Define the term pollutant. (1 mark)
ii) State the THREE factors that determine the severity of a pollutant. (3 marks)

Question THREE

- a) i) Define the term weapon. (1 mark)
ii) State FOUR reasons why people use weapons. (4 marks)
iii) State any TWO examples for each of the following classification of weapons
I) By user
II) By function
III) By target (6 marks)

- b) State any TWO effects of military activities on:
i) Environment
ii) Humans (4 marks)
- c) State the FIVE ideal characteristics of a biological weapon. (5 marks)

Question FOUR

- a) i) Define the following terms:
I) Climate
II) Global warming (3 marks)
- b) Explain any THREE effects of global warming. (9 marks)
- c) State any FOUR ways that can be used to reduce the effect of global warming. (4 marks)
- d) i) Explain the term ecosystem. (2 marks)
ii) State any TWO examples of ecosystems. (2 marks)

Question FIVE

- a) i) Define the term energy. (1 mark)
ii) Explain the TWO types of energy. (4 marks)
iii) State any ONE example for each type of energy named in (a) (ii) above. (2 marks)
iv) State any THREE significance of energy. (3 marks)
v) State any TWO measures in which a government can undertake in order to conserve energy. (3 marks)
- b) i) Define the term energy crisis. (1 mark)
ii) Explain any TWO causes of energy crisis. (6 marks)