

#### AMREF INTERNATIONAL TRAINING CENTER

Qualification Code : ENV/ CU/ SCI/ BC /01 /6/A

Qualification : Environmental Science Level 6

Unit Code : ENV/CU/SCI/CC/02/6/A

Unit of Competency : Climate Change and Global Warming

# WRITTEN ASSESSMENT

Time: 3 HOURS

## INSTRUCTIONS TO CANDIDATE

- 1. Marks for each question are indicated in the brackets.
- 2. The paper consists of **TWO** sections: **A** and **B**.
- 3. Candidates are provided with a separate answer booklet
- 4. **DO NOT** write on this question paper.

This paper consists of THREE (3) printed pages

Candidates should check the question paper to ascertain that all

pages are printed as indicated and that no questions are missing.

## **SECTION A (40 MARKS)**

## Answer ALL the questions in this section

1. Define the following terms

a) Climate change (2 Marks)

b) Global warming. (2 Marks)

2. Greenhouse gases (GHGs) are the gases in the atmosphere that raise the surface temperature of planets such as the Earth. Name **FOUR** major greenhouse gases.

(4 Marks)

- 3. Outline **FOUR** primary causes of climate change (4 Marks)
- 4. Identify **FOUR** significant impacts of climate change on ecosystems. (4Marks)
- 5. Highlight **FOUR** potential economic consequences of climate change (4 Marks)
- 6. State **FOUR** roles of renewable energy in mitigating climate change (4 Marks)
- 7. Distinguish between weather and climate (4 Marks)
- 8. Ocean acidification is the reduction in the pH of the ocean over an extended period of time. State **TWO** ways in which climate change affect ocean acidification (2 Marks)
- 9. The Earth is warming up at a steady pace. State **THREE** indicator for global warming (3 Marks)
- 10. Climate change presents a fundamental threat to human health. Highlight **THREE** health effects of climate change (3 Marks)
- 11. Burning coal produces CO<sub>2</sub>, Identify the source of the below air pollutants

(4 Marks)

- a) Carbon Monoxide,
- b) Sulphur Dioxide
- c) Nitrogen Dioxide,
- d) hydrocarbons,

#### **SECTION B (60 MARKS)**

## Answer Any THREE Questions in This Section

- 12. As an environmentalist officer in your county you are required to come up with ways to mitigate the effects of climate change.
  - a) Explain **FIVE** roles of individuals and communities in mitigating climate change (10 Marks)
  - b) Discuss **FIVE** sources of alternative sources of energy (10 Marks)
- 13. Global solutions for climate change are within our reach. With reference to this:
  - a) Explain **FIVE** benefits of the international agreements and policies in addressing climate change. (10 Marks)
  - b) Discuss **FIVE** international scientific consensuses on climate change (10Marks)
- 14. The transition to low-carbon economy is set to spur a massive re-allocation of capital as energy systems are rewired.
  - a) Describe **FIVE** challenges associated with transitioning to a low-carbon economy (10 Marks)
  - b) Explain **Five** Opportunities associated with low-carbon economy (10 Marks)
- 15. Climate Change is a growing threat to Kenya's environment and citizens and having a significant impact on the country's economy and development

- a) Explain **FIVE** warning signs of climate change (10 Marks)
- b) Discuss Four negative effects of climate change (10 Marks)