

1. State **three** causes of desertification.
2. a)i) Differentiate the term aridity and desertification
 ii) Differentiate between weather and climate
 b) State **two** causes of temperature inversion
 c) Explain the occurrence of a land breeze
3. a) Give **three** characteristics of the inter- tropical convergence zone
 b) (i) State **three** natural causes of climate change
 ii) Explain **four** consequences of climate change on the physical environment
 c) Give four reasons why some areas within the equatorial belt do not experience true equatorial climate
4. (a) Describe the climatic conditions experienced in the Kenya highlands
 (b) Explain **four** effects of folding to human activities
5. (a) Distinguish between **weather** and **climate**
 (b) State **six** characteristics of equatorial climate
6. (a) Explain how the following factors influence climate:
 (i) Ocean currents
 (ii) Altitude
7. (a) State **three** conditions necessary for the formation of dew
 (b) State **two** climatic reasons why the government should evict settlers from the Mau forest complex in the Rift valley of Kenya
8. (a) (i) What is a fog?
 (ii) State any **two** conditions necessary for the formation of fog.
 (b) Name any **two** isothermic layers of the atmosphere.
9. (a) What is an air mass?
 (b) Give **two** climatic characteristics of the Inter-Tropical Convergence Zone (ITCZ)
10. (a) Describe **two** characteristics of a mountain climate
 (b) (i) State **two** human causes of climate change
 (ii) Explain **three** consequences of climate change
 (c) Four classes intend to visit a weather station near your school to study the instruments for measuring weather element:-
 (i) Describe how you would use a rain gauge to measure rainfall
 (ii) Name **two** instruments you would find inside a Stevenson screen
11. a) What do you understand by:
 i) Micro- climate
 ii) Green house effect
 b) Name **two** weather recording instruments that are placed in a Stevenson's screen
12. (a) What is an air mass?
 (b) What two conditions favour formation of air mass?
13. (a) What is the Inter-tropical convergence Zone?
 (b) Account for any **four** characteristics of tropical rainforests.
14. (a) What is an air mass?
15. (a) (i) What is global warming?
 (ii) Give any **four** causes of climate change.
 (iii) Name **four** Green house gases

- (b)(i) Explain **five** effects of climate change
- (ii) Identify with evidence **two** climatic aspects that could have influenced the distribution of vegetation
- 16. (a) Differentiate between:
 - (i) Aridity and desertification
 - (b) Give **three** reasons why the recording of weather data at a weather station may be inaccurate
 - (c) State **two** qualities that makes Stevenson screen suitable for its work
- b) i) Briefly explain the green house effect and the global warming
- ii) Explain **three** effects of climatic change on the physical environment
- c) Explain how the following factors influence climate
 - i) Altitude
 - ii) Continentality
 - iii) Ocean currents