

1a) Differentiate between a mineral and a rock

(ii) Describe the following characteristics of Minerals

- Tenacity
- Lustre
- Streak
- Cleavage

1b) Describe the process of formation of the following rocks

(i) Chemically formed sedimentary rocks.

(ii) Organically formed sedimentary rocks.

(iii) Volcanic rocks

(iv) Plutonic rocks

1c) State four characteristics of metamorphic rocks

(d) Explain six significance of rocks to human activities in Kenya.

2a) Differentiate between absolute humidity and relative humidity.

(b) State three conditions necessary for the formation of a fog.

(c) State three significance of humidity.

3 Explain how the following weather instruments work

(i) Rain gauge

(ii) Maximum thermometer

(iii) Minimum thermometer

(iv) Sunshine recorder

(v) Mercury barometer

(vi) Aneroid barometer.

4a) What is precipitation

(b) State four characteristics of inter-tropical convergence zone

(c) With aim aid of well labelled diagram, describe how Frontal rainfall is formed.

5. State three conditions that are necessary for the formation of petroleum.

(b) Give two by-products of petroleum.

6. Explain six factors influencing exploitation of Minerals.

(b) Explain six factors influencing occurrence of Minerals.

(c) Explain six problems facing Mining industry in Kenya.

(d) Explain six significance of Mining in Kenya.

(e) Describe the open cast method of Mining.

(f) Explain three ways in which Mining promotes industrialization in Kenya.

7. What is the effect of international date line on time?

(b) Give the dates of each of the following seasons:

Equinox

Summer Solstice

Winter Solstice

8. Name two layers of discontinuity in the interior part of the earth.

(b) State three characteristics of the outer core.

9. Describe the shape of the earth.

10. State two types of earth movement.

(b) Explain four effects of revolution of the earth.

11. Describe the structure of the earth.

12. Explain how Geography is related with the following subjects.

Geography History

(i) Chemistry

(ii) Physics

(iii) Demography

(iv) Meteorology

13. Explain six importance of studying Geography.

14. Explain the origin of the Solar system according to:

(i) passing star theory

(ii) Nebula cloud theory.

15 State three weaknesses of passing star theory

16 Define the following terms

- (i) Statistics
- (ii) Statistical methods.
- (iii) A Map
- (iv) A plan
- (v) A picture
- (vi) fieldwork.

17 Explain six importance of fieldwork.

- (i) Explain three types of fieldwork.
- (ii) Explain the fieldwork procedure.

18 State three types of maps.

- (i) State four uses of maps.

(ii) identify five marginal information on topographical maps

19 State two uses of maps.

20 Name two types of rocks according to mode formation

- (i) Explain four positive ways in which rocks are significant to the Economy of Kenya.

19 Explain five types of fogs

20. With an aid of well labelled diagram, describe the formation of land breeze and sea breeze.