

13. EXTERNAL LAND FORMING PROCESSES

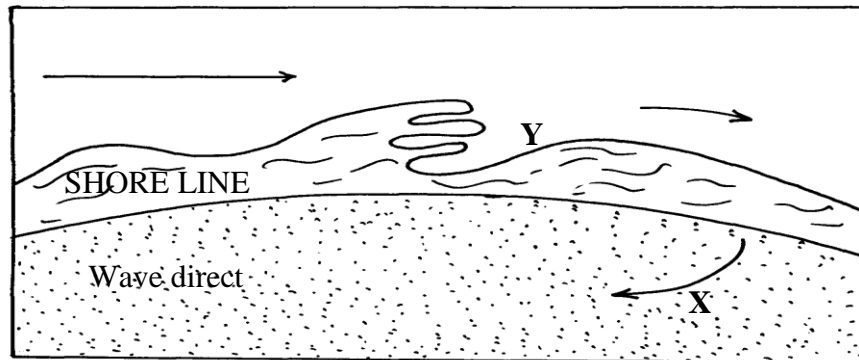
The topic entails ;-

- (i) **Definitions of :**
 - a) *Weathering*
 - b) *Mass weathering*
 - c) *Hydrological cycle and action of rivers*
 - d) *Oceans, Seas and their Coasts*
 - e) *Action of wind and water in Arid areas*
 - f) *Action of water in Limestone areas*
 - g) *Glaciation*
 - h) *Lakes*
- (ii) *Distinguishing between oceans and seas*
- (iii) *Description of water movements in oceans and seas*
- (iv) *Explaining the external land forming processes and the resultant features*
- (v) *Identifying the sources of under ground water*
- (vi) *Discussing the significance of the resultant physical features to the environment*
- (vii) *Carrying out field work of land forms within the local environment*

1. (a) Name **two** rivers in Kenya West of the Rift Valley that cause frequent flooding
(b) State **three** factors that lead to frequent flooding in the Lake region of Kenya
2. (a) i) Other than seif dunes, name two other types of sand dunes
ii) Give **five** characteristics of seif dunes
iii) State **four** factors that facilitate the formation of the sand dunes
b) Describe how a desert rock pedestal is formed
c) Explain **four** positive effects of desert features to human activities
3. a) i) Give **three** reasons why there are no ice sheets in Kenya
ii) Explain **three** factors that influence the movement of ice from the place of accumulation
b) Describe the process through which the following features are formed.
i) an arête
ii) A crag and tail
c) Explain **four** positive effects of glaciation in lowland areas
4. a) i) Give the dates in a year during which the number of hours of darkness is equal in both the north and the south poles
ii) Why do the lengths of days and nights vary from one part of the earth to another?
b) State **two** effects of the rotation of the earth on its axis
5. a) What is a **lake** ?
b) State **three** ways through which lakes are formed
6. a) i) What is **desertification**
ii) Differentiate between **wind deflation** and **wind abrasion**
iii) Describe how wind transports its materials through the following processes:
I) Saltation
II) Suspension
III) Surface creep
b) Describe how the following features are formed
i) Zeugens
ii) Oasis
7. a) State **two** ways in which glacier moves

b) State **three** differences between a young river valley and a glaciated valley

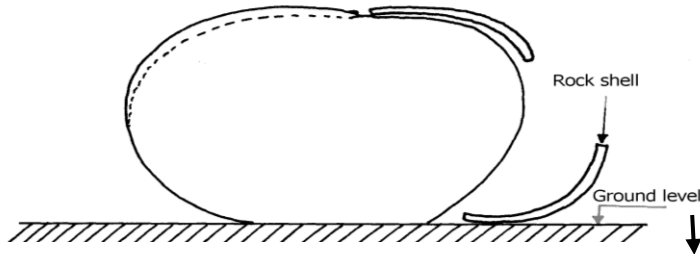
8. The diagram below represents the action of waves on the coastline. Use it to answer questions (a) and (b)



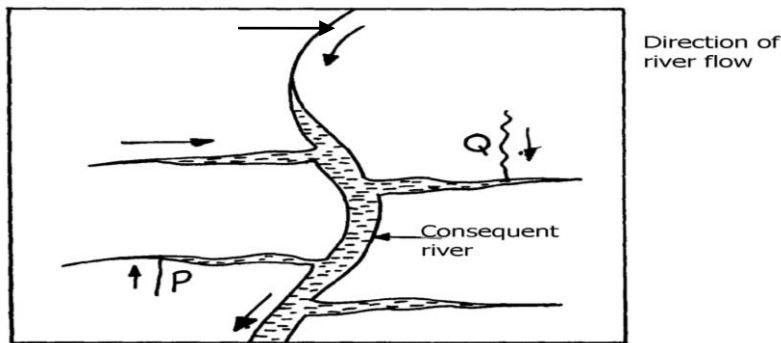
- a) Name the features marked **X** and **Y**.
b) List **three** ways in which waves erode the coastline.
9. Name **two** sources of underground water.
10. a)i) What is chemical weathering
ii) State **five** factors that affect the rate of chemical weathering in equatorial regions
b) Explain the following chemical weathering process
i) Carbonation
ii) Hydrolysis
c) Explain **four** economic importance of weathering to physical and human environments
11. a) Name **two** types of tides
b) Give **three** ways in which the shape of the landmasses may influence movement of ocean waters
(c) State **four** sources of underground of water
(d) State **five** ways in which springs occur
(e) Account for **four** ways in which desert vegetation adopt to the climate of their environment
12. (a) Hamada and Erg
(b) Explain **three** processes of wind erosion
(c) With the aid of well labeled diagrams, describe the formation of:
i) A Barchan
ii) Rock pedestal
iii) An oasis
(d) Name **three** features resulting from water deposition in desert
13. State **three** reasons why wind erosion is predominant in desert areas.
(b) Describe **three** processes by which wind erodes.
(c) With aid of well labeled diagrams, describe the formation of the following desert features;
(i) Rock pedestal.
(ii) Zeugen.
(d) State **four** ways in which desert land forms influence man's activities.
14. (a) Differentiate between oceans and seas.
(b) Explain **three** sources of salinity in the oceans .
(c) State **three** features on the ocean floor.
15. (a)(i) What is the difference between a sea and an ocean?
ii) Explain any **three** ways in which islands are formed.
(b) (i) Describe how **Lake Victoria** was formed.

- (ii) Explain any **three** ways in which **Lake Victoria** has influenced the climate of surrounding areas
- (c) (i) Distinguish between aridity and desertification
- (ii) Explain any three physical causes of aridity and desertification

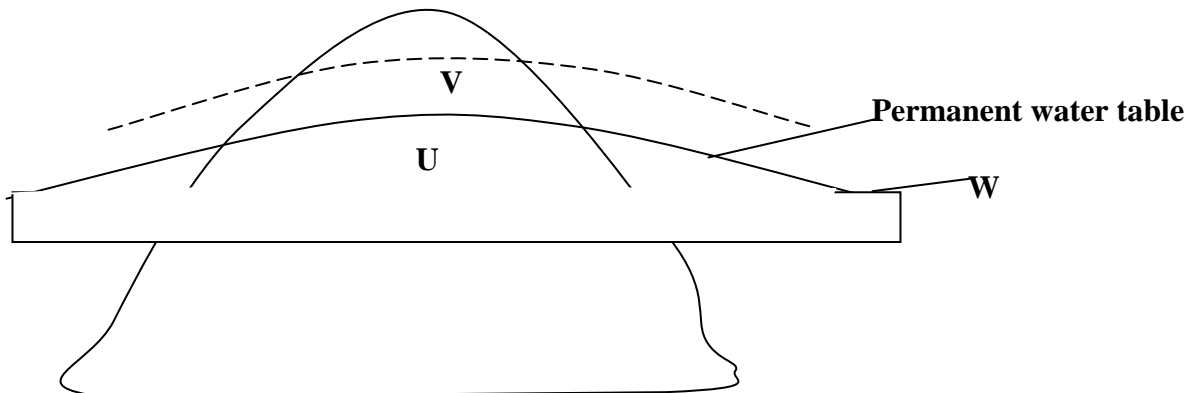
16. (a) (i) What is chemical weathering?
 (ii) Name any **three** surface features that result from carbonation.
- (b) The diagram below shows a feature resulting from weathering. Use it to answer the questions that follow:-



- (i) What is the name of the feature?
 - (ii) Describe how the feature is formed.
17. (a) Differentiate between a river system and a river regime.
- (b) The diagram below shows a drainage pattern. Use it to answer the questions that follow:-



- (i) Name the drainage pattern.
 - (ii) Name the parts labelled **P** and **Q**
18. (a) Name any **two** features deposited by glacier in lowland areas.
- (b) Describe how a roche moutonnee is formed.
19. (a) The diagram below shows zones of underground water. Use it to answer the questions that follow:-

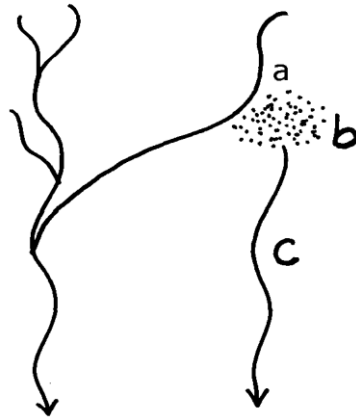


- (i) Name the parts labelled **U** and **V**.

- (ii) Name the surface water feature likely to form at the part labelled **W**.
 (b) Explain how the nature of underground rocks influences the existence of underground water
20. (a) (i) State **two** ways in which wind erodes the surface of the earth
 (ii) Explain **three** ways through which wind transports its load
 (b) Using well labeled diagrams, describe how the following desert features are formed:-
 (i) Zeugen
 (ii) Rock pedestal
 (c)(i) Give the name given to rocky desert in the Sahara
 (ii) Explain **three** positive effects of desert features to both human and physical environment
21. (a) What is a lake?
 (b) (i) Name **two** types of lakes formed due to vulcanicity
 ii) explaining how lake Victoria has influence the climate of the surrounding area
 (c) (i) State **four** main reasons why lakes within the Rift valley are salty
 (ii) Name any **three** fresh water lakes in Kenya which are within the rift valley
 (d) Explain any **four** economic significance of lakes to Human activities
22. (a) Name three types of tides
 (b) Differentiate between oceans and seas
23. (a) (i) Differentiate between aridity and desertification
 (ii) Describe **three** ways through which wind erodes the desert areas
 (b) Using well labelled diagrams describe how the following desert features are formed:
 (i) Rock pedestals
 (ii) Yardangs
 (c) State **five** uses of desert features
24. (a) State **four** factors which may cause a waterfall to form
 (b) (i) Describe how river braids are formed
 (ii) Name **three** features resulting from river rejuvenation
 (c) Describe how a river capture occurs
 (d) Give **two** reasons as to why Lake Naivasha is a fresh water lake
25. Give **three** ways through which rocks may be metamorphosed
26. (a) (i) State **two** processes through which the wind erodes the surface.
 (ii) Explain **three** ways through which wind transport its load
 (b) Describe how the following desert features are formed :
 (i) Oasis
 (ii) Zeugen
 (c) Explain **four** ways in which desert land forms are of significance to human activities
27. (a) (i) Name **two** ways in which ice moves
 (ii) State **two** factors which facilitate the movement of ice
 (b) Identify **two** erosional features in glaciated lowlands
 (c) Describe how the following features are formed:
 (i) Outwash plain
 (ii) Moraine-dammed lake
 (d) Explain **four** ways in which a glaciated landscape is of significance to human activities
28. (a) Differentiate between mechanical and chemical weathering

(b) State **three** factors which influence weathering

29. a) Differentiate between a spring and well.
b) With aid of a well labeled diagram, show the three Zones of ground water.
c) List four candidates necessary for the formation of an artesian well.
d) Explain **three** ways in which ground water is of significant to human activities.
e) i) Define the term Karet scenery
ii) Give **two** conditions for the development of Karet landscape
iii) Outline the significance of Karet landscape to human activities.
30. (a) Use the diagram below to answer the following questions

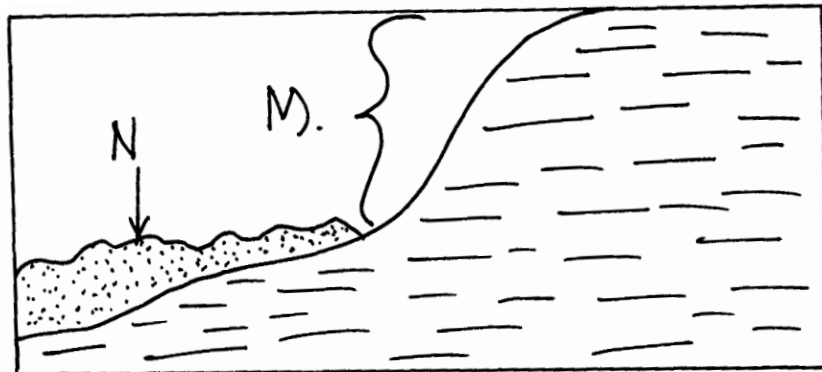


- (i) Name the parts labelled :-
(ii) State **four** causes of river rejuvenation

31. a) i) Differentiate between denudation and mass wasting.
ii) Explain **two** reasons why chemical weathering is dominant in humid tropics.
b) Explain **three** factors that influence mass wasting.
c) With aid of a diagram, explain the process of solifluxion.
d) i) State **four** negative effects of mass wasting.

Name the:

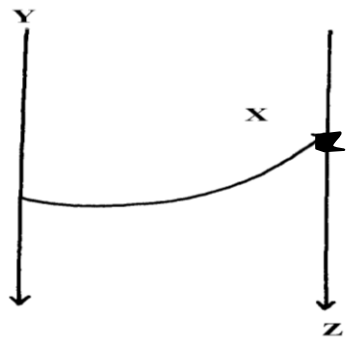
- i) Type of mass movement shown



- iii) Features M and N
iv) State the factor that influenced the process above

- 32 a) State **three** reasons why wind is a major agent of land sculpture in the desert.

- b) Explain any **two** processes of wind erosion in deserts.
- c) With and of well labeled diagram, explain how a deflation hollow is formed.
- d) State **four** characteristics of a seif dune.
33. a) State **two** causes of coastal submergence.
b) Name **three** conditions necessary for the growth of coral polyps.
- 34 a) State **two** ways in which wind transport it's load
b) Highlight the factors that influence the formation of a desert sand dune
35. a) Name **three** sources of lake water.
b) State **three** factors that determine the size of a lake.
36. a) i) What is a **river**?
ii) Distinguish between a river confluence and a river tributary
b) Describe how a river erodes its channel by the following processes
i) Hydraulic action
ii) Abrasion
37. a) Describe the process of a river capture
b) State **five** characteristics of a flood plain
38. a) i) Name **four** features resulting from water action in deserts
ii) State **three** factors which contribute to the development of deserts
iii) Name **three** types of deserts according to the nature of their surfaces
b) i) Explain **three** factors which influence wind transportation in deserts
ii) How is an oasis formed?
39. (a) What is the difference between swash and backwash
(b) Why is wave cut platform and cliff line in Mombasa found above the sea level?
40. (a) Define the term river capture
(b) The diagram below shows a river capture, name the features marked **X, Y, Z**



41. (a) Differentiate between **accordant** and **discordant** drainage systems
(b) State **three** factors that facilitate formation of deltas
42. a) i) What is a desert

- ii) Name **three** types of desert landscapes
 - b) i) Name **two** processes of wind erosion responsible for sculpturing desert landscapes
 - ii) Using well labeled diagrams describe how a zeugen may be formed
 - c) i) Name **four** desert landforms found in deserts associated with the action of water
 - ii) What is the significance of desert landforms
43. (a) (i) Name **three** processes of wind erosion in desert
- (ii) State **three** factors which influence the rate of wind transportation
- (b) With the help of a well labeled diagram describe the formation of the following features:-
- (i) Rock pedestal
 - (ii) Oasis
- (c) (i) List **three** external land forming processes which lead to the formation of lakes
- (ii) Explain **three** ways in which lakes influence the natural environment
- (d) (i) With the aid of a well labelled diagram, Describe how limestone pillars are formed in Karst scenery
- (ii) Explain **three** significance of resultant feature in limestone areas to human activities