

Q1. Changes in the angle at which the sun's rays strike the earth's surface and changes in the amount of daylight cause the seasons.

- a) Determine the seasons that obtained from these changes.
- b) Describe the position of the earth during the summer solstice.
- c) Where do the sun's rays strike the earth at a  $90^\circ$  angle?

Q2. To what extent, the gravitational force is greater near the poles and less at equator?

Q3. What observation first led to Wegener's hypothesis of continental drift?

Q4. a. What do cause plates to move?

- b. Name and describe the three types of plate boundaries.

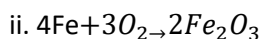
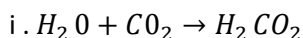
Q5. How does the revolution of the earth determine the length of the day and the night at different times of the year? Justify your answer by using diagram.

Q4. Describe the exogenic processes that shape earth's surface.

Q5. a) Determine the environmental regions, where the process of carbonation is dominating.

- b) What chemical weathering process occurs when minerals in the rock react with carbon dioxide?

c) Name the following processes(reactions) related to chemical weathering:



Q6. How plants and animals help weather rocks.

Q7. (a) Explain how does climate affect people's culture?

(b) How will climate change affects the ecosystem?

Q8. Automobiles exhaust contains nitrogen oxides; how might these pollutants affect chemical weathering processes?

Q9. a) In what region does snow accumulate year after year?

- b) What main type of glacier covers Greenland?

Q 10. With the aid of a diagram, explain how land and sea breeze are formed?

Q11. Describe the main causes of mass wasting that use to occur in north- western part of Rwanda. How the community work (umuganda) contribute to reduce mass wasting in your area?

Q12. The force of wind erodes the land in a number of ways, and the best known wind deposits are dunes.

- a) Distinguish two ways of wind erosion.
- b) Determine the 2 types of Sand dunes.

Q13. Why is mass wasting in Rwanda dominating north and western regions?

Q14. a) Differentiate the two main types of wave action

- b) Determine 4 processes in which wave erosion occurs

Q15. There are various features resulting from the external land forming processes due to the action of water, glacier, wind, etc

(a) Name one place where ice is found in Rwanda and explain the reasons why in our country glaciation is not a common agent of land form formation.

(b) Classify the following features according to their categories by filling the table below (dune, moraine, gully, cirque, oasis, delta, ox-bow lake, inselberg, beach, fjord);

Agents	Erosional features	Depositional features
Rain water		
Glacier		
Winds		
River work		
Waves action		

Q16. The geological timescale is a system of chronological measurement that relates layering of rocks (stratification) to time and is used by geologists, paleontologists and other earth scientists to describe the timing and relationship between events that have occurred throughout Earth's history.

- a) Identify 3 main divisions of geological time scale
- b) Describe the importance of geological time scale

Q17. a) To what extent is environmental degradation a consequence of man's mis-use of the environment?

- b) Suggest ways in which environmental degradation may be controlled.

Q18. a) Describe and explain how the type and intensity of mechanical weathering varies with climate.

- c) Describe and explain how the type and intensity of chemical weathering varies with climate.

Q19. How useful are mean annual temperature and mean annual rainfall as a way of explaining variations in the type and intensity of weathering processes?

Q20. Describe at least two ways of classifying mass movements.

Q21. Study the table below showing oil production in Africa in (000) tones and answer the questions that follow.

COUNTRY	1969	1974	1979
Algeria	43,840	48,300	50,100
Angola	2,460	8,700	6,700
Egypt	12,960	11,700	26,400
Gabon	5,030	9,200	10,800
Libya	149,700	73,500	99,800
Nigeria	27,000	113,500	114,500
Tunisia	3,710	4,100	5,500

- (i) Which country experienced the highest increase in oil production between 1969 and 1979?  
(ii) Which country experienced the lowest increase in oil production between 1969 and 1979?
- (i) Briefly describe the formation of oil.  
(ii) How is oil drilled?
- Explain the effects of oil drilling on the environment.
- State the uses of oil and oil products.

Q22. Study the map shown below and answer the questions that follow



Saint Lawrence Sea way is a common of a system of canals that permit ocean vessels to travel from the Atlantic Ocean to in land water of the above region shown above. This sea way is the most important water way and is shared by two countries.

- a) Describe the region in which this sea way is found depending on its geographical position
- b) Identify the two countries shared the above sea way.
- c) Why the St Lawrence seaway was constructed?
- d) Describe the problems facing the people using the St Lawrence seaway.

Q23.Carefully observe the photograph shown below and answer related questions

- a)
  - i) Identify the economic activities carried out in the area covered by the photograph and give evidence to support your answer.
  - ii) Determine any 2 favoring factors for the development of activity mentioned above.
  - iii) What the problems faced by the activity identified in (a)(i) in this days
- b) Describe the contribution of the activity on the population of the region and on the local environment.



- b) Where and why this kind of photograph could be found in Rwanda? **(2marks)**
- d) Determine the type of settlement pattern related to the area shown. **(1marks)**
- e) Describe the landform features dominating this region. **(2marks)**

Q20. Maps are tools used also in statistical representation of human and physical features in their distribution on the globe:

- (a) What to understand by map projection
- (b) Mention the types of map projection which are best for the equatorial, polar and middle latitudes zones
- (c) What will be the scale of a map has **1/50000** if has been reduced four times.
- (d) Mention any six elements of a good map
- (e) Give any two uses of maps
- (f) Mention any four human features which can be easily interpreted when represented on a map