



**312/1 MS
GEOGRAPHY
Paper 1
MARKING SCHEME
March 2021**

**THE KENYA NATIONAL EXAMINATIONS COUNCIL
KENYA CERTIFICATE OF SECONDARY EDUCATION**

GEOGRAPHY

Paper 1

**MARKING SCHEME
(CONFIDENTIAL)**

**THIS MARKING SCHEME IS THE PROPERTY OF THE KENYA NATIONAL
EXAMINATIONS COUNCIL AND IT MUST BE RETURNED TO THE KENYA
NATIONAL EXAMINATIONS COUNCIL AT THE END OF MARKING**

This marking scheme consists of 20 printed pages.

**@ 2020 The Kenya National Examinations Council
Turnover**

MARKING SCHEME

SECTION A

Marks Sub

PDF Compressor Free Version

1. (a)	<p>Define the term environment.</p> <p>- Environment is the external conditions that surround an organism/external conditions that influence the development and behaviour of an organism.</p>	<p>2 2 (2 marks)</p>
(b)	<p>Name ^{two} three divisions of physical Geography.</p> <ul style="list-style-type: none"> - Climatology / Meteorology. - Biogeography / Ecology. - Geomorphology - Earth and the solar system. ^{Hydrology} - pedology 	<p>Any 3 x 1 = (3 marks) Any 2 x 1</p>
2. (a)	<p>Give three characteristics of comets.</p> <ul style="list-style-type: none"> - They are made up of frozen gases / dust and small rocky particles. - They have a head and tail. - They move along oval-shaped orbit. - The sun is located at one end of their orbit. - They cross orbits followed by the planets. 	<p>2 2 4</p>
(b)	<p>State three proofs that show the shape of the earth is spherical.</p> <ul style="list-style-type: none"> - Circumnavigation along a straight path leads one to the starting point from the opposite direction. - Photographs taken from satellite clearly show the earth is spherical. - The gradual emergence of a ship approaching the shore. - During lunar eclipse spherical shaped shadow of the earth is cast on the moon. - The earth is a planet and all planets are spheres. - The different times during which the sun rises and sets in different parts of the world. - The earth's horizon appears circular/curved <u>when viewed from a very high point.</u> 	<p>Any 3 x 1 = 3 (3 marks) 3</p>
3. (a)	<p>Give two types of igneous rocks.</p> <ul style="list-style-type: none"> - Intrusive igneous rocks. / Plutonic / hypabyssal - Extrusive igneous rocks. / Volcanic 	<p>Any 3 x 1 = 3 6</p>
(b)	<p>Identify three uses of rocks.</p> <ul style="list-style-type: none"> - Rocks weather down to form soils which support agriculture. 	<p>2 2 marks)</p>

- Some rocks are used for scrubbing human bodies
- Some rocks store water for use sharpening tools.
Some rocks form fossil fuels

	<ul style="list-style-type: none"> - Some rock features are tourist attraction. ✓ - Rocks provide materials for building/construction. ✓ - Some rocks provide raw materials for manufacturing industry. ✓ - Some rocks are source of minerals. ✓ - Some rocks are used in carving. ✓ - Some rocks are source of salt. ✓ <i>Food</i> 	<p>Any 3 x 1 = (3 marks)</p> <p>3</p>																																							
<p>4.</p>	<p>The table below shows the rainfall and temperature data for town Y. Use it to answer question 4</p> <p>(a)</p> <table border="1" data-bbox="347 696 1305 864"> <thead> <tr> <th>Month</th> <th>J</th> <th>F</th> <th>M</th> <th>A</th> <th>M</th> <th>J</th> <th>J</th> <th>A</th> <th>S</th> <th>O</th> <th>N</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>Temperature (°C)</td> <td>21</td> <td>21</td> <td>20</td> <td>18</td> <td>15</td> <td>14</td> <td>13</td> <td>13</td> <td>15</td> <td>16</td> <td>18</td> <td>20</td> </tr> <tr> <td>Rainfall (mm)</td> <td>24</td> <td>25</td> <td>30</td> <td>74</td> <td>17</td> <td>143</td> <td>131</td> <td>126</td> <td>70</td> <td>55</td> <td>31</td> <td>27</td> </tr> </tbody> </table> <p>(a) (i) What is the mean annual range of temperature? $(21 - 13) = 8^{\circ}\text{C}$ / $\frac{204}{12} = 17^{\circ}\text{C}$ ✓</p> <p>(ii) Calculate the rainfall totals for town Y. 753mm ✓</p> <p>(b) State three climatic conditions experienced in the hot deserts.</p> <ul style="list-style-type: none"> - Low rainfall/below 250mm per year. - <i>Rare erratic rainfall</i> - High temperatures throughout the year / <i>over 35°C</i> - The diurnal range of temperatures is very large / <i>hot days and cool nights.</i> - Low humidity / <i>below 45%</i> - The skies are cloudless / <i>clear</i> - There are strong dusty winds/sand storms / <i>dry winds</i> 	Month	J	F	M	A	M	J	J	A	S	O	N	D	Temperature (°C)	21	21	20	18	15	14	13	13	15	16	18	20	Rainfall (mm)	24	25	30	74	17	143	131	126	70	55	31	27	<p>(1 mark)</p> <p>1</p> <p>2</p> <p>3</p> <p>Any 3 x 1 = (3 marks)</p> <p>3</p>
Month	J	F	M	A	M	J	J	A	S	O	N	D																													
Temperature (°C)	21	21	20	18	15	14	13	13	15	16	18	20																													
Rainfall (mm)	24	25	30	74	17	143	131	126	70	55	31	27																													
<p>5. (a)</p>	<p>Differentiate between ocean and sea.</p> <ul style="list-style-type: none"> - An ocean is a large/extensive body of saline water occupying a basin between continents, while a sea is a large body of saline water along the continental margins. ✓ 	<p>2</p> <p>(2 marks)</p>																																							

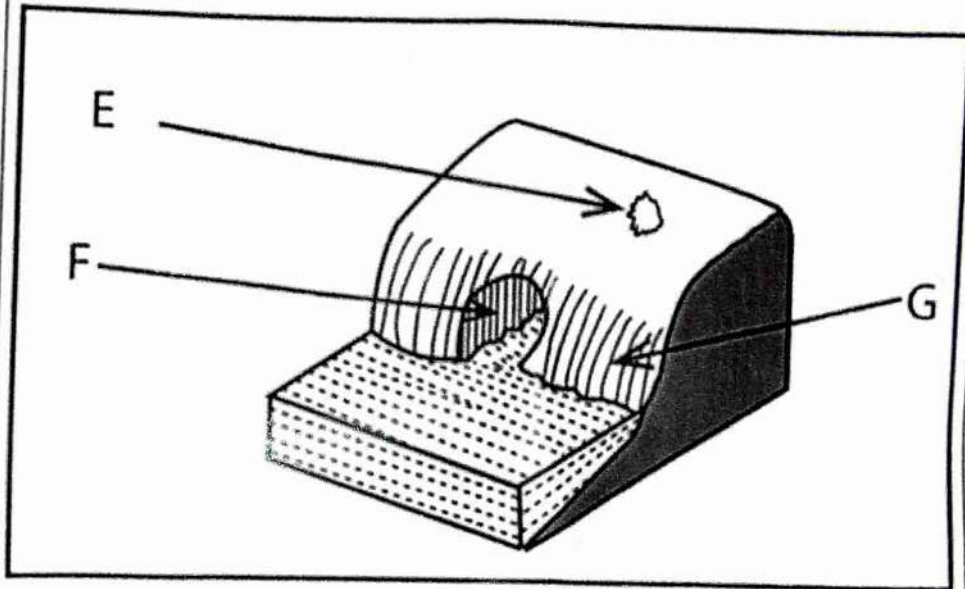
Based on the mistake in the question

(b) The diagram below shows some coastal features. Name the features marked E, F and G.

E - Blow-hole / *Gloof*

F - Cave

G - Cliff



3
marks

3 3
5

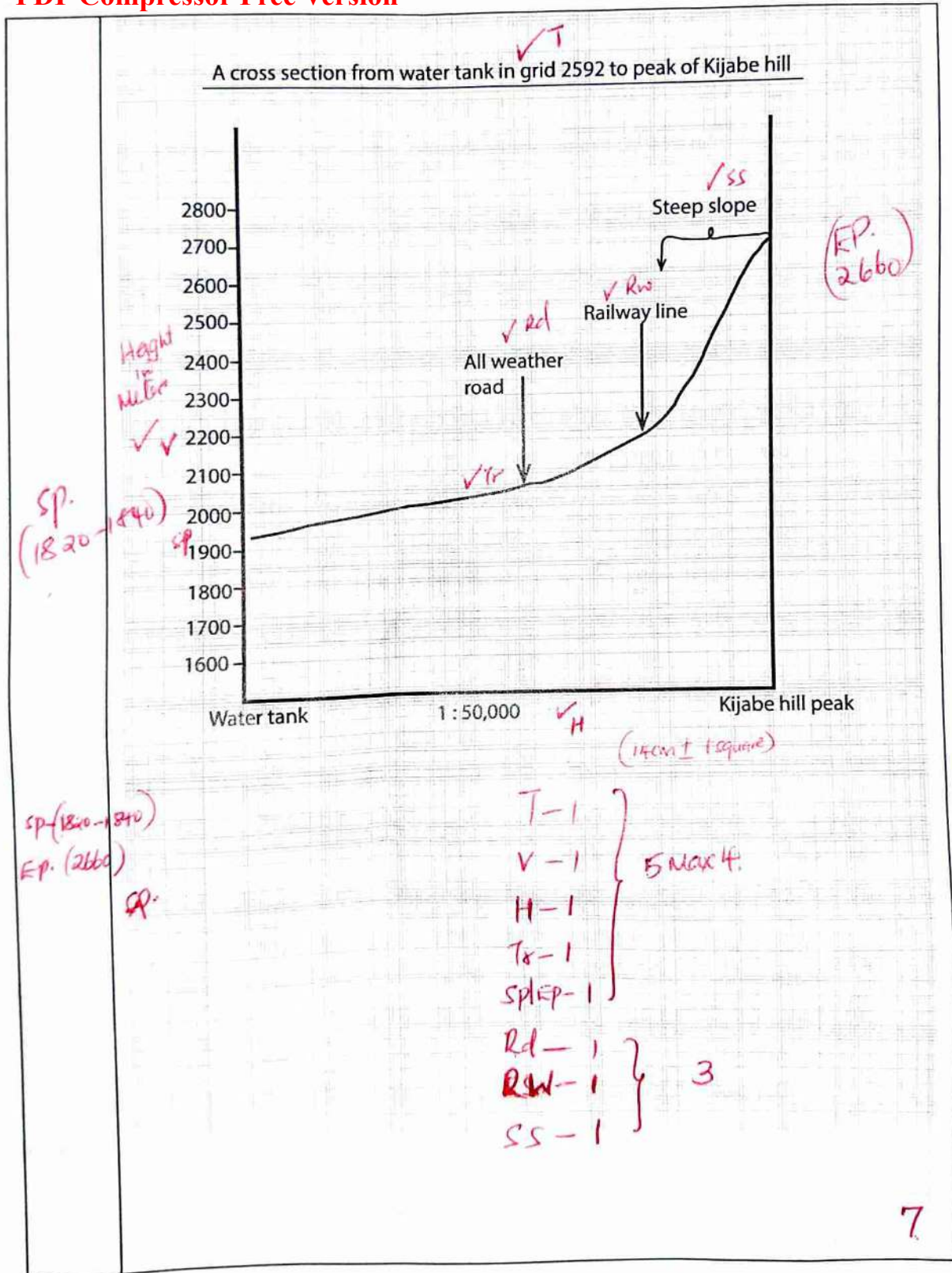
25

SECTION B

Answer question 6 and any other two questions from this section.

<p>6. (a)</p> <p>* ✓ (i)</p>	<p>Study the map of Kijabe 1:50,000 (Sheet 134/3)</p> <p>Provided and answer the following questions.</p> <p>Convert the scale of the map into a statement scale.</p> <p>Map scale: 1:50,000</p> <p>1cm rep 50,000</p> $5000\text{cm} = \frac{50000\text{km}}{100000}$ $= 0.5\text{km}$ <p>Statement scale is 1cm represents 0.5/½km</p>	<p>(2 marks)</p>
<p>* ✓ (ii)</p>	<p>What is the bearing of the pump house at grid square 3893 from the trigonometrical station at Mweri.</p> <p>300° ± 1° 299° - 301° / N60°W ± 1° (N69°N - N61°W)</p>	<p>(2 marks)</p>
<p>(iii)</p>	<p>Calculate the area of the part of the forest to the East of Easting 40 and South of Northing 97. Give your answer in square kilometres.</p> <p>Full squares = 17 15</p> <p>1/2 square $\frac{18}{2} = 9$ $\frac{20}{2} = 10$</p> <p><u>26</u></p> <p>26 ± 1 (24 - 26 km²)</p> <p>= 26 ± 0.5 km²</p>	<p>(2 marks)</p> <p>6</p>
<p>(b) (i)</p>	<p>Apart from forest give three types of natural vegetation found in the area covered by the map.</p> <ul style="list-style-type: none"> - Thicket ✓ - Woodland ✓ - Scrub ✓ - Bamboo ✓ - Scattered trees ✓ <p>Any 3 x 1 = 3</p>	<p>Any 3 x 1 = (3 marks)</p>

	<p>(ii) Identify three drainage patterns found in the area covered by the map.</p> <ul style="list-style-type: none"> - Radial drainage pattern. - Dendritic drainage pattern. - Parallel drainage pattern. 	<p>3</p> <p>6 (3 marks)</p>
<p>(c) (i)</p>	<p>Using a vertical scale 1cm to represent 100 metres, draw a cross section from the water tank on grid square 2592 to the peak of Kijabe Hill on grid square 2699.</p> <p>On it, mark and label the following:</p> <ul style="list-style-type: none"> - All weather road bound surface. - Railway line. - Steep slope. 	<p>(4 marks)</p> <p>(3 marks)</p>



	<p>(ii) Calculate the vertical exaggeration of the cross section.</p> $VE = \frac{VS}{HS} = \frac{1:100m}{1:50,000cm}$ $= \frac{1:10000}{1:50,000} = 1 \times 5$ $= 5 \text{ times}$	<p>2 9 (2 marks)</p>																						
<p>NS</p>	<p>(d) Citing evidence from the map identify two economic activities in the area covered by the map.</p> <table border="1" data-bbox="383 929 1133 1332"> <thead> <tr> <th>Economic activity</th> <th>Evidence</th> </tr> </thead> <tbody> <tr> <td>- Transportation <i>va</i></td> <td>- Roads/railway <i>ve</i></td> </tr> <tr> <td>- Forestry <i>va</i></td> <td>- Line/motorable track <i>ve</i></td> </tr> <tr> <td>- Trade <i>va</i></td> <td>- Forests/forest station forest guard post <i>ve</i></td> </tr> <tr> <td>- Communication <i>va</i></td> <td>- shops/post office <i>ve</i></td> </tr> <tr> <td>- Quarrying <i>va</i></td> <td>- Murrumbidgee quarry <i>ve</i></td> </tr> <tr> <td>- Lumbering <i>va</i></td> <td>- Saw mills <i>ve</i></td> </tr> <tr> <td>- Cattle rearing/keeping <i>va</i></td> <td>- Cattle dip/dairy water troughs <i>ve</i></td> </tr> <tr> <td>- Dairy farming <i>va</i></td> <td>- Dairy <i>ve</i></td> </tr> <tr> <td>- Manufacturing/processing <i>va</i></td> <td>- Kagwe carbacid plant <i>ve</i></td> </tr> <tr> <td>- Crop farming <i>va</i></td> <td>- Plantation <i>ve</i></td> </tr> </tbody> </table>	Economic activity	Evidence	- Transportation <i>va</i>	- Roads/railway <i>ve</i>	- Forestry <i>va</i>	- Line/motorable track <i>ve</i>	- Trade <i>va</i>	- Forests/forest station forest guard post <i>ve</i>	- Communication <i>va</i>	- shops/post office <i>ve</i>	- Quarrying <i>va</i>	- Murrumbidgee quarry <i>ve</i>	- Lumbering <i>va</i>	- Saw mills <i>ve</i>	- Cattle rearing/keeping <i>va</i>	- Cattle dip/dairy water troughs <i>ve</i>	- Dairy farming <i>va</i>	- Dairy <i>ve</i>	- Manufacturing/processing <i>va</i>	- Kagwe carbacid plant <i>ve</i>	- Crop farming <i>va</i>	- Plantation <i>ve</i>	<p>* - Activity can come alone. but evidence should be tied to activity.</p> <p>Any 2 x 2 = (4 marks)</p>
Economic activity	Evidence																							
- Transportation <i>va</i>	- Roads/railway <i>ve</i>																							
- Forestry <i>va</i>	- Line/motorable track <i>ve</i>																							
- Trade <i>va</i>	- Forests/forest station forest guard post <i>ve</i>																							
- Communication <i>va</i>	- shops/post office <i>ve</i>																							
- Quarrying <i>va</i>	- Murrumbidgee quarry <i>ve</i>																							
- Lumbering <i>va</i>	- Saw mills <i>ve</i>																							
- Cattle rearing/keeping <i>va</i>	- Cattle dip/dairy water troughs <i>ve</i>																							
- Dairy farming <i>va</i>	- Dairy <i>ve</i>																							
- Manufacturing/processing <i>va</i>	- Kagwe carbacid plant <i>ve</i>																							
- Crop farming <i>va</i>	- Plantation <i>ve</i>																							
<p>7. (i)</p>	<p>(a) Define the term vulcanicity.</p> <p>(i) Vulcanicity is the process through which liquid, solid or gaseous materials <i>are forced</i> find their way into the earth <i>crust</i> surface or onto the surface of the earth, <i>due to high pressure and temperature.</i></p>	<p>4 4 (25)</p> <p>(2 marks)</p>																						
	<p>(ii) Name the three stages in the life cycle of a volcano</p> <ul style="list-style-type: none"> - Active <i>✓</i> - Dormant <i>✓</i> - Extinct <i>✓</i> 	<p>(3 marks)</p> <p>3 5</p>																						
	<p>(b) Describe how the following volcanic features are formed.</p> <p>Lava plateau</p>																							

PDF Compressor Free Version

<p>(i)</p> <p><i>This point must be mentioned to score max 4 marks</i></p>	<ul style="list-style-type: none"> - It is formed when magma reaches the earth surface through either single or multiple vents/fissures. ✓ - The lava is <u>ultra-basic</u>/extremely fluid. ✓ - The lava flows over ^{long} large distances spreading evenly ^{covering} before cooling. ✓ <i>hills and depressions</i> - The lava cools slowly, <i>and solidifies</i> ✓ - <i>* Successive eruptions lead to more and more layers building up forming a lava plateau. ✓</i> <i>thick plain land table land called lava plateau</i> 	<p>Any 4 x 1 = 4 marks</p> <p>(8 max 4) 4</p>
<p>(ii)</p> <p><i>This point must be mentioned to score a maximum 4 marks</i></p>	<p>Geyser</p> <ul style="list-style-type: none"> - Water percolates underground through cracks in the rock. ✓ - The water gets into contact with hot igneous rocks. ✓ - The water is superheated to form gases/vapour <i>steam</i>. ✓ <i>pressure builds up</i> - The pressure forces the steam and water to be ejected to the surface. ✓ - The water and steam is <i>emitted</i> emptied intermittently as pressure level changes to form a geyser. ✓ 	<p>Any 4 x 1 = 4 marks</p> <p>(7 max 4) 4</p>
<p>(iii)</p> <p><i>Explanation given by board</i></p> <p><i>Must be mentioned to score a mark 4</i></p> <p><i>Substance by eruption theory</i></p>	<p>Caldera</p> <ul style="list-style-type: none"> - Lava ^{pours} pouring out of a central vent to form a volcanic cone. ✓ - The vent ^{is} may be sealed when lava solidifies in it. ✓ - The solidified lava blocks the gases and steam beneath, preventing them from escaping. ✓ - Pressure piles up below the lava. ✓ - The pressure leads to <u>violent eruption which blows off the top</u> of the cone forming a depression. ✓ - The depression is large and circular and it is known as a caldera/.OR ✓ - Lava pours out of a central vent to form a volcanic cone ✓ 	<p>Any 4 x 1 = 4 marks</p>

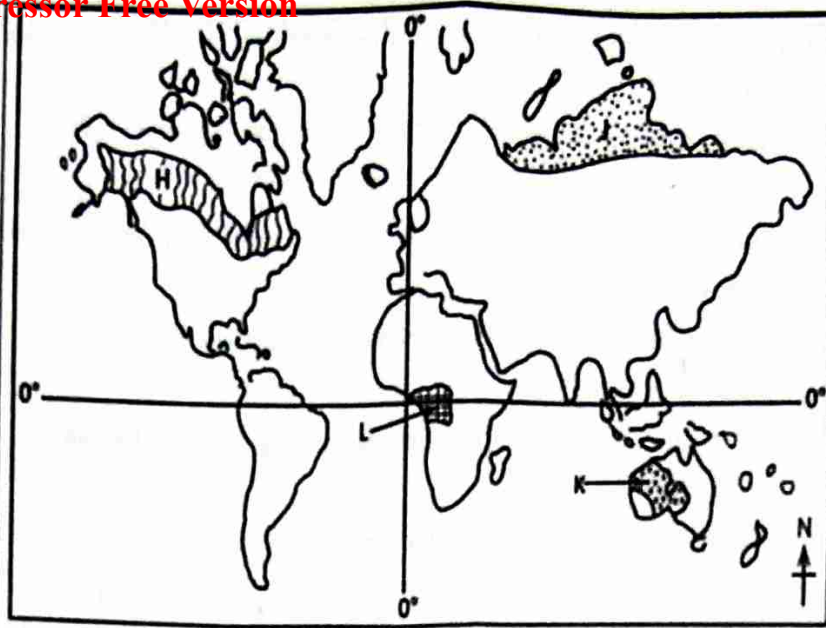
- Magma chambers are left empty / void / ~~caldera~~

PDF Compressor Free Version

	<ul style="list-style-type: none"> - Due to the overlying weight at the top of the cone, an ^{pressure} imbalance is ^{is exactly} created. - The top of the cone subsides ^{sinks} forming a depression - This depression is large ^{and circular} and is called a caldera ✓ 	<p>Any 4 x 1 = 4 marks</p>
<p>(The point must be mentioned to score a maximum of 4 marks)</p> <p>Outward sloping they must be mentioned to score a mark of 4 marks</p>	<ul style="list-style-type: none"> - A volcano is build of ash & Pyroclasts to form a dome ✓ - The weak materials at the base are unable to support the overlying materials / weight - The materials at the base spread outwards as the top part of the volcano sinks / subsides. - This will lead to a large depression called a caldera ✓ 	<p>4 12</p>

Some lava
found to
be good
for
agriculture

<p>(c) *</p>	<p>Explain four positive ways in which volcanic features influence human activities.</p> <ul style="list-style-type: none"> - Volcanic lava upon weathering forms fertile soils which are used in agricultural activity. - Some volcanic plugs have valuable minerals which are ^{mined} useful to human beings. - ^{Steamjets} Geysers are used in harnessing geothermal electricity for domestic/industrial use. - Some volcanic features attracts tourists earning a country foreign exchange. - Volcanic mountains influence the formation of relief rainfall on their slopes which encourages agricultural activities/settlement. ^{mineral} - Volcanic lakes are used for fishing which is a source of income/food. - Some lakes are a source of water for domestic/industrial use. ^{spring} - Volcanic mountains have forests which provide timber for building/construction. - Volcanic mountains are a source of rivers which provide water for domestic/industrial/irrigation. ^{H.E.P} - ^{Hot spring/spa} Hot spring/spas are used for medicinal purposes. - Some volcanic rocks are used as building materials. 	<p>Any 4 x 2 = 8 marks</p> <p>8</p> <p>25</p>
<p>8.</p>	<p>The map below shows some vegetation regions of the world. Use it to answer question (a) (i) and (ii)</p>	<p>Any 4 x 2 = 8</p>



PDF Compressor Free Version

(a) (i)	<p>Name the vegetation marked H, J and K.</p> <p>H – Coniferous forest ✓</p> <p>J – tundra ✓</p> <p>K – Tropical desert ✓</p>	<p>3</p> <p>3 marks</p>
(ii)	<p>Describe the characteristics of the vegetation found in the area shaded and marked L.</p> <ul style="list-style-type: none"> - The trees grow close to each other ✓ / <i>closely packed</i> - The trees form canopies ✓ / <i>from three distinct layers / emerging</i> - The trees have straight ✓ / <i>smooth</i> trunks ✓ - Most of the trees species are hardwoods ✓ - The trees are evergreen ✓ - The trees have broad ✓ / <i>drip-tipped</i> leaves ✓ - The forests have little or no undergrowth ✓ - Forests consist of a variety of tree species ✓ - Some of the trees have buttress roots ✓ - The trees are tall ✓ - <i>The forest has climbers / epiphytes</i> - <i>Trees take long to mature</i> 	<p>Any 6 x 1 = 6 marks</p> <p>Any 6 x 1 6 9</p>
(b)	<p>Explain how the following factors influence distribution of vegetation.</p> <p>(i) Rainfall</p> <ul style="list-style-type: none"> - Areas receiving high rainfall encourage growth of many varieties of tree species ✓ / <i>luxuriant vegetation / forest</i> - Areas receiving low rainfall have few species ✓ / <i>scanty stunted</i> vegetation. 	<p>Any 1 x 2 = 2 marks</p>
	<p>- <i>Areas of low rainfall have stunted vegetation</i></p>	<p>Any 1 x 2 2</p>

<p>(ii) Soils</p>	<ul style="list-style-type: none"> - Rich ^{Deep} and well drained soils support growth of dense vegetation. - Poor /infertile/shallow/ thin soils support scanty vegetation. 	<p>Any 1 x 2 = 2 marks 4</p>
<p>(c)</p>	<p>State five uses of savanna vegetation.</p> <ul style="list-style-type: none"> - The grassland area is used for livestock farming/grazing. - The vegetation provides habitat for wild animals. - Trees are used for bee keeping. - Some of the vegetation is used for medicinal purposes. - Some of the vegetation provides wild fruit and berries. - Trees are a source of wood fuel. - Some of the vegetation provide building materials. - Grass forage decompose to form humus. 	<p>Any 5 x 1 = 5 marks</p>
<p>(d) (i)</p>	<p>You intend to carry out a field study on vegetation within the local environment.</p> <p>(i) State three objectives you would formulate for the study.</p> <ul style="list-style-type: none"> -To identify vegetation species dominant in the area. -To find out how the local people benefit from the vegetation. -To investigate problems facing vegetation in the area. -To find out methods used to conserve vegetation in the area 	<p>Any 3 x 1 = 3 marks</p>
<p>(ii)</p>	<p>Give four reasons why it is important to have a work schedule.</p> <ul style="list-style-type: none"> - It helps in carrying out the field activities systematically. 	<p>Any 3 x 1 = 3 marks</p>

must be of research topic

	<ul style="list-style-type: none"> - It helps in estimating the total time required for the study. ✓ - It ensures all areas of study are adequately covered. ✓ - It helps in assessing progress of the study. ✓ - It enables for proper use of available time. ✓ - It confines one to the scope of the study. ✓ 	<p>Any 4 x 1 = 4 marks</p>
9.	<p>Apart from biological weathering list two other types of weathering</p> <p>(a) (i)</p> <ul style="list-style-type: none"> - Mechanical/physical ✓ - Chemical ✓ 	<p>(25)</p> <p>2 marks</p>
	<p>(ii) Explain ways in which plants cause weathering of rocks.</p> <ul style="list-style-type: none"> - Roots of plants/trees penetrate into the joints/cracks of rocks widening them hence causing the rock to disintegrate. ✓ - Plants decompose/rot forming organic/humic acids which causes rock decay/disintegration. ✓ - Mosses and lichens <u>moisten</u> rock surfaces facilitating chemical weathering. ✓ - Widening of crack and joints by plants roots allows water and air to enter into the rocks hence accelerating weathering. ✓ 	<p>Any 3 x 2 = 6 marks</p>
	<p>(b) Explain how the following physical factors influence mass wasting.</p> <p>(i) Earth movements</p> <ul style="list-style-type: none"> - Volcanic eruptions/earthquakes cause tremors which may trigger displacement of materials/ wide spread mass wasting. ✓ 	<p>2 marks</p>
	<p>(ii) Nature of rock material</p>	

- mosses & lichens
 may cause much
 weathering. The more
 - mosses may secrete
 acids which
 cause rock to
 break apart.

- Loose/unconsolidated materials easily mass on slopes.

PDF Compressor Free Version

	<ul style="list-style-type: none"> - Large/heavy rock materials move rapidly on a slope, ^{due to gravity.} Since they are overcome by gravity, thinly bedded layers tend to move faster. ^{on slopes.} - Saturated rock materials move faster down a slope than ^{dry materials.} non-saturated materials. 	<p>Any 1 x 2 = 2 marks</p> <p>4</p>
(c)	<p>Describe each of the following processes of mass wasting.</p> <p>(i) Avalanche</p> <ul style="list-style-type: none"> - It is a sudden movement of a large mass of snow/ice with loose materials down slope due to gravitational pull. - It occurs when a fresh fall of snow is not firmly consolidated hence slides over the older snow/ice. ^{rapidly} - The thawing action of ice lubricates weathered rock and large ice blocks making them slide downhill as an ^{avalanche.} 	<p>Any 2 x 1 = 2 marks</p>
(ii)	<p>Rockfall</p> <ul style="list-style-type: none"> - It involves free fall ^{of} detached rocks down a steep/vertical slope. - They may fall directly downwards or bounce and roll down the slope. - It may occur due to freeze-thaw process ^{loosening} action of plant roots ^{heating & cooling} and influence of gravitational pull. ^{earth movement} - The debris form cone shaped heap at the foot of the cliff/hill. 	<p>Any 3 x 1 = 3 marks</p> <p>5</p>
(d)	<p>Describe each of the following types of mass wasting.</p> <p>(i) Earthflow</p> <ul style="list-style-type: none"> - It occurs in humid ^{conditions.} - ^{Occurs on moderate slopes.} Materials on the surface get saturated with water. - They flow ^{down} the hill under the influence of gravity. - They leave behind shallow scars. 	<p>Any 3 x 1 = 3 marks</p>

PDF Compressor Free Version

	<ul style="list-style-type: none"> - They form small bench like terraces at their destination. 	<p>Any 4 x 1 = 4 marks</p> <p>4</p>
(ii)	<p>Slump</p> <ul style="list-style-type: none"> - It occurs on very steep slopes. <i>Concave slopes</i> - A massive sedimentary strata overlying weak rock materials e.g. clay. - The underlying rock material is saturated with water. - This causes undercutting/breaking off of the overlying rock materials. - The large mass of rock and loose materials shear/tear away along the concave plane. - The rock material slides downhill causing a slump. 	<p>Any 5 x 1 = 5 marks</p> <p>4 8</p>
10.	<p>Give three features found in the upper stage of river.</p>	<p>25</p>
(a) (i)	<ul style="list-style-type: none"> - V-shaped valleys. - Potholes/plunge pools. - Interlocking spurs. - Waterfalls/rapids/cataracts. - Gorges/canyons. - <i>Winding channels.</i> 	<p>Any 3 x 1 = 3 marks</p> <p>3</p>
(ii)	<p>State four factors that favour the formation of braided channels</p> <ul style="list-style-type: none"> - The river must be carrying a large load. - There should be reduction in the stream gradient. - There should be presence of obstacles. - There should be reduction of volume of water due to high evaporation/dry season. <i>in the river</i> - The river flows at low velocity. - <i>widening of the River channel.</i> 	<p>Any 4 x 1 = 4 marks</p> <p>4 7</p>
(b)	<p>Explain the processes which a river transports it's load.</p>	

PDF Compressor Free Version

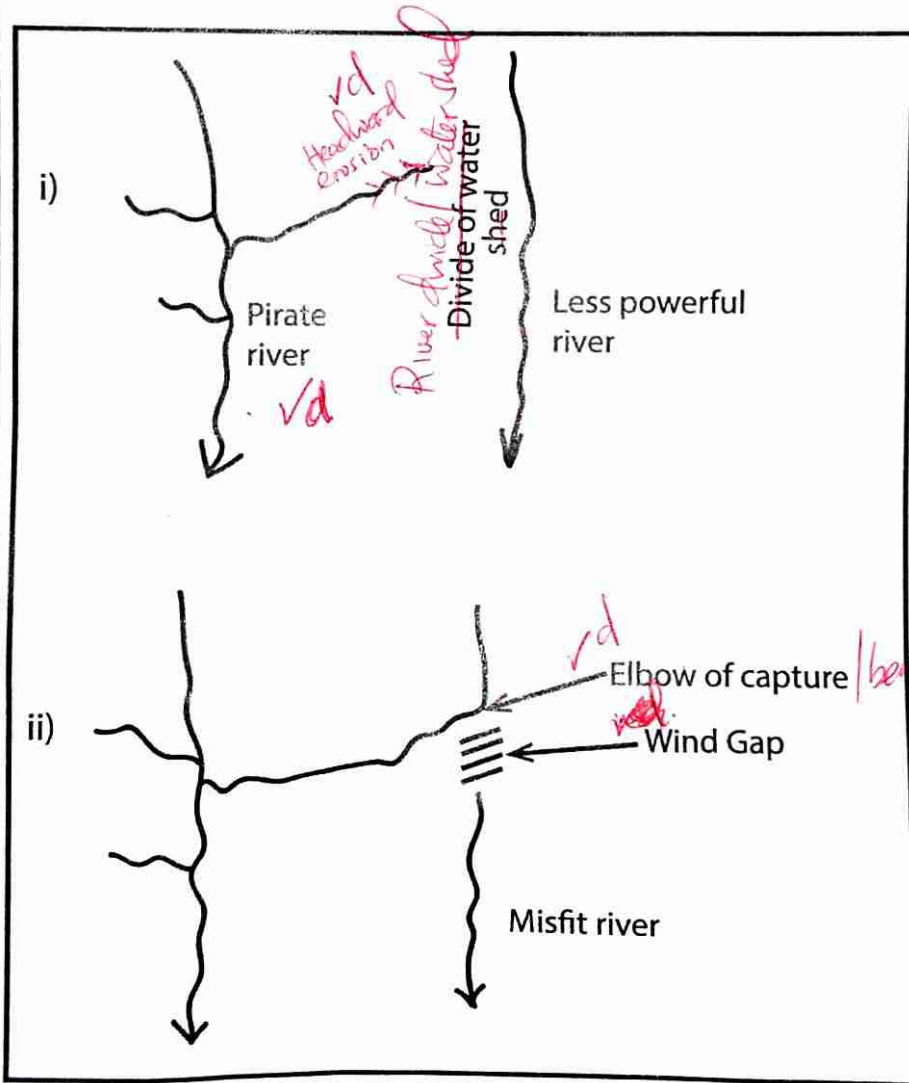
<ul style="list-style-type: none">- Light insoluble materials such as silt and sand are carried in suspension and maintained within the turbulence of the water. Some of them float on the surface of the water.- Large particles/boulders are pushed and rolled along the river bed by the force of gravity and moving water. This process is known as traction- Soluble materials are dissolved in the water and carried down the stream in form of solution.- Some particles/pebbles which are fairly heavy are moved in a series of leaps and hops along the river bed through a process known as saltation.	<p>4 x 2 = 8 marks</p>
---	-----------------------------------

* Process can score on it's own but not the explanation

P-4 }
e-4 }

8 | 8

(c) With the aid of well labelled diagrams describe how a river capture occurs.



enters on elbow as windgap

	<ul style="list-style-type: none"> - River capture may occur where there are <u>two adjacent</u> rivers [✓] share a watershed. - One of the rivers has <u>more erosive power</u> [✓] than the other. - The more powerful river erodes both [✓] vertically and [✓] laterally faster than the weaker one thus it flows at a lower level than the other one. - The more powerful river erodes it's valley towards the valley of the other river, [✓] Through headward erosion [✓] - Eventually the powerful river joins the valley of the weaker river. [✓] - The powerful river diverts the head waters of the weaker river into it's channel. [✓] 	<p>Any 4 x 1 = 4 marks</p> <p>Text = 4 marks</p> <p>Diagrams = 3 marks</p>
(d)	<p>State three negative effects of rivers to human environment.</p> <p><i>f - max 4</i> <i>d - 3</i></p> <ul style="list-style-type: none"> - Some rivers with almost stagnant water harbor waterborne diseases, [✓] vectors - Some rivers flood during rainy seasons causing destruction of property [✓] and life. [✓] - Some rivers are home to dangerous animals which may attack human beings [✓] / destroy crops. - Rivers which are unnavigable hinder transportation. [✓] 	<p><i>River capture</i></p> <p>7 7</p> <p>Any 3 x 1 = 3 marks</p>

- River flooding causes displacement of people

Any 3 x 1

3 | 3

 25