TANZANIA HEADS OF ISLAMIC SCHOOL COUNCIL (TAHISCO)

INTER ISLAMIC MOCK EXAMIMNATION

GEOGRAPHY 01

MARKING SCHEME

2026

SOLUTION

1. (a) The area covered buy forest in $km^{2.}$

Data

- Complete square = 8
- Incomplete squares = 26 **(02 marks)**
- Map scale = 1:50,000

- Change map scale into km.

If 1km = 100,000 cm

? 50,000 cm

$$\frac{100{,}000cm\ x}{100{,}000cm} = \frac{1km \times 50{,}000cm}{100{,}000cm}$$

x = $\frac{1}{2}km$ or 0.5 km

$\therefore$ 1 cm = $\frac{1}{2}km$ **(01mark)**

Then

Actual area of each grid square

Actual area = With x length

= Width x width

2cm



Cm

2cm x 2cm

$$\left(2 \times \frac{1}{2}km\right) \times \left(2 \times \frac{1}{2}km\right)$$

1km x 1km = $1km^2$

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(a) Actual area of grid square = $1km^2$ **(00 ½ mark)**

- Total area = complete square + $\frac{(Incompolete\ squares)}{2} \times 1km^2$ **(00 ½ mark)**

= $8 + \frac{(26)}{2}$ x $1km^2$

= 8 + 13 x 1km2 = $21km^2$ **(01 ½ marks)**

The area covered by the forest is $20km^2$.

(b) The gradient of the slope from grid reference 140898 to grid reference 180956.

Gradient = $\frac{VI}{H.E}$ **(00 ½ mark)**

Where = VI = Vertical interval

= HE = Horizontal equivalent of the slope

Data

VI = Highest altitude – Lowest altitude

1020m - 820m = 200m

VI = 200m **(00 ½ mark)**

HE = 12.9cm **(00 ½ mark)**

Map scale = 1:50,000 i.e. 1cm represent ½ km

There fore

Gradient = $\frac{200m}{\left(12.9cm \times \frac{1}{2}\right) \times 100m}$ **901 mark)**

= $\frac{\mathbf{200m}}{\mathbf{6450m}}$

= $\frac{\mathbf{1}}{\mathbf{32.25}}$ **or 1:32.25**

Thus gradient from grid reference 140898 to 180956 is 1:32.25, this implies that there is a rise of 1m high in every horizontal distance of 32.25m. **(01mark)**

(c) Method that have been used to show relief/exact height of relief features on the map.

(i) Contouring method, this is evidenced on map due to the presence of contours which have been sown on the whole mapped area.

(ii) Spot height, this is evidenced on map at grid reference 153901 i.e. 915 and grid reference 218002 i.e. 1425.

(iii) Hacharing method, this is found at grid reference 107903.

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Any 2 points @ = 01 ½ mark = 03 marks)

(d) The area has vegetation of woodland, forest and scrubs that are unevenly distributed due to the following reasons:-

(i) Relief, in the northern part i.e. steeply sloped area there is poor coverage of plants compared to southern part

(ii) Climate in the southern part covered by dense forest due to heavy rainfall compared to northern part

(iii) Soil, this is evidenced in southern part of the map i.e. there is deep and well drained soil

(iv) Human occupation/activities

Any 03 points @ = 01 ½ marks = (4 ½ marks)

(e) Economic activities carried out in the mapped area are as follows:

(i) Tourism this is due to existence of attractive scenery like hills

(ii) Trade, this is done due the existence of high population that act as market for produced goods and services

(iii) Lumbering activities due to presence if forest in the southern part and woods

(iv) Agriculture (livestock keeping and crop cultivation) due to the existence of veterinary centre which offer treatment and vaccination to animals and existence of numerous scattered cultivation.

Any 3 points @ 01 ½ marks = (04 ½ marks)

(f) Climatic condition, since the area is found in the tropical region, thus it experience seasonal moderate high rains, this due to prevalence of both wet and dry seasons. **(02marks)**

(g) The nature of transport in the area is land transport of the following varied systems.

(i) Roads such as all weather bound surface road from Mpwapwa to other areas

(ii) Railways this is remarkable in western part and much enhanced by the Gulwe railway station.

(iii) Tracks, these are minor roads along which motor vehicles move.

(02 marks)

TOTAL = 25 Marks

2. SOLUTION

(i) Reduced level rise and fall method

STATION	B.S	IS	FS	RISE	FALL	RL	REMARKS
BM	0.3					100.0	BM
A		0.5			0.2	99.8	
B		0.6			0.1	99.7	
C	0.4		1.2		0.6	99.1	CP
D		0.7			0.3	98.0	
E			0.5	0.2		99.0	
Σ	0.7		1.7	0.2	1.2		

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(07 Marks)

Arithmetic check

ΣBS - ΣFS = ΣRIIΣ - ΣFALL = Last RL – First RL **(01Mark)**

0.7 – 1.7 = -1, 0.2 – 1.2 = -1, 99 – 100 = -1

i.e. ΣBS - ΣFS = -1 **(01 Mark)**

ΣRISE - ΣFALL = -1 **(01 Mark)**

Last RL – First RL = -1 **(01 Mark)**

Therefore recording and reduction of leveling was correctly done.

(ii) The changing point station C (01Mark)

(b) The benefits of the method on the basis of land planning are

(i) It is used for he construction of playing ground, like football ground

(ii) It is useful for designing and constructing sewage system

(iii) It is used for locating settlement and industrial areas

Any 3 points @ 01 mark

TOTAL = 15 MARKS

3. SOLUTION

(a) Cumulative values

- MBEGA: 10+5+40+10 = 65
- MVUTI: 20+15+15+20 = 70
- KITUNDA: 15+20+20+30 = 85
- KIVULE: 20+15+10+8 = 53
- BUYUNI: 10+20+30+15 = 75
- VIGWAZA: 15+15+20+20 = 70 **(01 ½ Marks)**

WARDS	SIZE OF LAND USE OF TATAL AREA "000"KM			
	Wasteland	Pasture	Arable	Garden
Mbega	15.3%	7.6%	61.5%	15.3%
Mvuti	28.5%	21.4%	21.4%	28.5%
Kitunda	17.6%	23.5%	23.5%	32.2%
Kivule	86.9%	28.3%	18.8%	15%
Buyuni	13.3%	26.6%	40%	20%
Vigwaza	21.4%	21.4%	28.5%	28.5%

(01 ½ marks)

Determination of horizontal and vertical scale

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Horizontal scale = $\frac{The\ sun\ of\ cunulative\ value}{Rectangle\ length}$

H.S = $\frac{(65+70+85+53+75+70)}{10cm}$

= $\frac{418}{10cm}$ =

∴ Thus H.S = 1cm to 41% **(00 ½ mark)**

3(a) Vertical scale = $\frac{100\%}{10cm}$

= 10%

∴ V.S = 1cm to 10% **(00 ½ mark)**

Then

Convert the land use size of each area into cm.

MBEGA: If 1cm = 41%

? $\times$ 65%

$\frac{x41\%}{41\%} = \frac{1cm \times 65\%}{41\%} = 1.5cm$

WARD	Land use size in cm
Mbega	1.5cm
Mvuti	1.7cm
Kitunda	2cm
Kivule	1.2cm
Buyuni	1.8cm
Vigwaza	1.7cm

@ = (00 ½ marks) = 03 marks

(b) The uses of land vary from one place to another due to the activities taking place in a particular area. Example land is used for arable activity in large extent also sometime land is used for garden and for wasteland. **(01mark)**

(c) Merits of the compound divided rectangle are:

(i) It allows easy quantitative analysis as it gives more information than compound bar graph.

(ii) It is more illustrate as it provide visual idea to the uses in data comparison

(iii) It is useful method for showing cumulative values

Any 3 points @ = 00 ½ mark = (01 ½ marks)

Set backs of the compound divided rectangle

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(i) It is time consuming to draw
(ii) It is much less used for statistical data representation
(iii) It need high skills to prepare
(iv) It is too tedious in calculating and identifying scales
Any 3 points @ = 00 ½ mark = 0`1 ½ marks

4. The occurrence of both mechanical and chemical weathering in tropical areas enhanced by the following similar factors
Any good introduction **(01 mark)**

Main body
Any points @ **03 marks = 18 marks**

Conclusion. Any good and relevant conclusion **(01 mark)**

- Climate. This by the conditions of both temperature and rainfall make the occurrence of chemical and mechanical weathering differently area to area.
- Nature of rocks, it is considerably to mineralogical composition and structure of rocks. Mineralogical composition determines the nature of weathering.
- Topography. It is considerably to the surface nature of the area in terms of slope steepness and gentleness
- Rock age. Old rocks are more susceptible to weathering as for long enough have been much subjected to different weather forces compared to young rocks.
- Vegetation cover, this includes the forest and grasses that mostly characterize the tropical region. It reduces the rate of physical weathering by lowering down the rate of intensity of rain water and surface run off
- Man activities. Human activities of farming, mining, engineering works and other in tropical areas; contribute greatly to weathering.
TOTAL = 20 MARKS

5. Any good introduction **(02 marks)**

Main body
Any points @ **02 marks = 16 marks**

Conclusion. Any god and relevant conclusion **02marks)**

Positive roles by human are those which maintain soil fertility and considerably include the following

- Crop rotation. It is a practice of growing different types of crops in different seasons. The practice helps the maintenance of nutrients to be exchanged in the soil.
- Mulching. It is a practice of covering the soil with the vegetative materials. Mulching helps to add organic matter in the soil.

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- Cover cropping
- Green manuring. It is a practice whereby a crop mostly of legume is grown on a piece of land and then in cooperated into the soil while it is still green and tender.
- Addition of organic manures. These are materials naturally contain organic matters. They include form yard manures and compost manures.
- Addition of inorganic manures. There are the artificial fertilizers manufactured in industries and contain nutrient elements. Include urea and NPK.

Negative roles by human are those by practices which destroy soil fertility. These considerably include the following

- Burning of vegetation. This kills the soil living organisms which are very important to cause the decomposition of organic matters. More importantly, burning exposes the soil to the hazard of soil erosion.
- Weeding, it is a practice f removing the unwanted plants. When this is done, all nutrients that have been taken by them from the soil, lost in weeds as thrown away
- Monoculture. It is a practice of growing the same crop continuously season to season. It leads to soil fertility decline as such practice does not offer reasonable exchange of nutrients in the soil
- Over cropping. This makes excessive consumption of nutrients by plants and thus; fertility decline after a short period of farm use
- Cultivation to follow the slope. This accelerates soil erosion and ultimately to the decline of fertility as nutrients lost in soils washed down the slope

TOTAL = 20 MARKS

6. Introduction: Any relevant introduction related to climate. **(02 marks)**

Main body

(c) Agriculture. Climate determine crops to begrown, time for sowing or planting and harvesting. Too heavy rain may cause soil erosion, strong winds destroy crops, long period of drought lead to the death of crops hence discourage agriculture

(ii) In transportation. Wind encourages both air transport by using balloons and water transport by using dhows. Occurrence of storms, snow fall and heavy rainfall leading to floods may discourage air water and land transport.

(iii) Sports. Cold climate leading to the formation of ice sheets encourages skiing, example in Switzerland. Warm climate encourages swimming example in Coco Beach in Dar es Salaam.

(iv) In settlement, Areas with moderate temperature encourages settlement while extreme level of temperature, cold and floods due to heavy rainfall discourage settlement. Example floods in Jangwani Dar es Salaam discourage settlement.

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(v) Generation of power. H.E.P generated due to high and reliable rainfall. Example Kidatu, Mtera. Wind power is due to strong winds, solar powers is due to hot climates such as in the tropics. Example in Tanzania

(vi) Climate influences the style of house construction. In cold areas affected by snow or ice, the house roofs have steep slopes while in arid areas their roofs an be flat or gentle sloping.

(vii) Climate influences dressing. Example in cold area wearing heavy clothes like in Arusha while in warm areas, they are dressing light clothes like Dar es Salaam due to the high amount of temperature

(vii) Climate influences tourism activity. The cold climate and high temperature discourage the presence of tourism due to that climate affect people, while moderate climate influence the occurrence of tourism industry

Total 16 marks @ 02 marks

Conclusion: Any relevant conclusion **(02 marks)**

(TOTAL 20 MARKS)

7. Introduction **(01 mark)**

Any relevant introduction

Main body

- Spring influences sites for settlement in many regions of the world. Example spring line settlement in London basin
- Springs are also a source of domestic water to the town. Example town of Moshi in Kilimanjaro
- Also water is used for irrigation in the dry areas. For example agriculture is practiced around the oases on Sahara Desert
- It acts as a source of rivers. For example in Kenya Highlands and those of Southern Tanzania
- Hot spring and geysers are sometimes used for generating geothermal power. Example is the Great Rift Valley of Kenya
- It is useful in keeping some lakes and oceans fresh due to the ground water seeps to the ocean, lakes, rivers and streams making water suitable for industrial and home use. Example lake Naivasha has an underground seep to the Indian Ocean

06 points @ 03 marks
TOTAL 18 MARKS

Conclusion. Any relevant conclusion **(01 mark)**
TOTAL = 20 MARKS

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