

FORA SIX INE-ILAMIC Mock EXAMINATION

GEOGRAPHY 1

MARKING SCHEME - 2025

1. Solution

A) T_1 --- March 2015.

T_2 --- April 2019.

MV_1 --- $9^\circ 47'$

MV_2 --- ? 01 mark

Rate of change --- $2'$ per annum negatively 01 mark

The difference in time = $T_2 - T_1$

2019 April

- 2015 February 01 mark
 $\frac{4 \text{ yrs } 2 \text{ month}}{12} \Rightarrow 4\frac{2}{12} = 4\frac{1}{6} = 4.2$

Difference in time is 4.2 01 mark

The total magnetic variation

$$1 \text{ yr} = 2'$$

$$4.2 = x$$

$$4.2 \times 2 = 8.4' \text{ (minutes)} \cdot \text{01 mark}$$

New magnetic variation is

$$9^\circ 47' - 8.4'$$

$$8.4 \text{ min} = 8' 24''$$

$$9^\circ 47' - 8.4' = 9^\circ 36.6' = 9^\circ 36' 36'' \text{ 01 mark}$$

B) Area of square = Full sq + $\frac{\text{H alve sq}}{2}$

Full squares = 42

H alve squares = 6

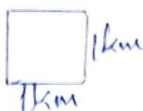
$$\text{Area} = 42 + \frac{6}{2} \text{ 02 marks}$$

$$= 42 + 3$$

$$\text{Area} = 45 \text{ squares}$$

1

area of a square



$$\text{Area} = 1\text{km} \times 1\text{km} = 1\text{km}^2$$

Hence

$$45 \times 1\text{km}^2 = 45\text{km}^2$$

02 marks

c) i/ vegetation

ii/ Latitude

iii/ Altitude

@ 0.5 mark = 1.5

According to the determinants the area has a tropical grassland climate

1.5 marks

d) Factors for composition of the mapped area:

i/ Nature of the land surface

ii/ Scale of the map

iii/ Purpose of the map

iv/ Date of compilation.

02 marks

@ 0.5

E) Geological structure

- Igneous rocks due to radial drainage pattern in N.W, presence of hills in S.W of Ibali hill and presence of dense forest (Mbeya forest reserve)

0.5 mark

- Sedimentary rocks due to presence of lowland at the central part of the map where deposition can occur, and the presence of scrubs on the map.

0.5 mark

1.

F/ Population distribution.

Population is unevenly distributed due to 02 marks

Relief features: i.e. mountain, valleys and plain areas. People can't live on mount Karuwe instead on plain areas. 01 mark

Climate affects population distribution, areas with favourable rain has good number than areas with little rain 01 mark

Economic factors and social services affect distribution i.e. their presence attract people than their absence 01 mark.

G/ Main types of vegetation on mapped area:

- Scrubs that cover the Northern part. 01 mark

- Scattered trees in the Northern part. 01 mark

- Forest at the central part eg Mbeya forest reserve 01 mark

H/ Hemisphere of the mapped area:

The mapped area is found in the Southern hemisphere due to the presented latitude i.e. 8°55'S 01 Mark

TOTAL = 25 Marks

2.

Calculate the percentage

ii/2001

Score A

$$\frac{10}{570} \times 100\% = 1.8\%$$

Score B

$$\frac{80}{570} \times 100\% = 14\%$$

Score C

$$\frac{150}{570} \times 100\% = 26\%$$

Score D

$$\frac{30}{570} \times 100\% = 5.3\%$$

Score E

$$\frac{30}{570} \times 100\% = 52.6\% \quad (01 \text{ mark})$$

iii/2002

Score A

$$\frac{5}{150} \times 100\% = 3.3\%$$

Score B

$$\frac{60}{150} \times 100\% = 40\%$$

Score C

$$\frac{35}{150} \times 100\% = 23.3\%$$

Score D

$$\frac{20}{150} \times 100\% = 13.3\% \quad (01 \text{ mark})$$

Score E

$$\frac{30}{150} \times 100\% = 20\%$$

iii/2003

Score A

$$\frac{30}{480} \times 100\% = 6.3\%$$

Score B

$$\frac{50}{480} \times 100\% = 6.3\%$$

Score C

$$\frac{100}{480} \times 100\% = 20.8\%$$

Score D

$$\frac{200}{480} \times 100\% = 41.7\%$$

Score

$$\frac{100}{480} \times 100\% = 20.8\% \quad (01 \text{ mark})$$

iv/2004

Score A

$$\frac{20}{330} \times 100\% = 6.1$$

Score B

$$\frac{100}{330} \times 100\% = 30.3\%$$

Score C

$$\frac{150}{330} \times 100\% = 45.5\%$$

Score D

$$\frac{60}{330} \times 100\% = 18.2\%$$

Score E

$$\frac{0}{330} \times 100\% = 0\% \quad (01 \text{ mark})$$

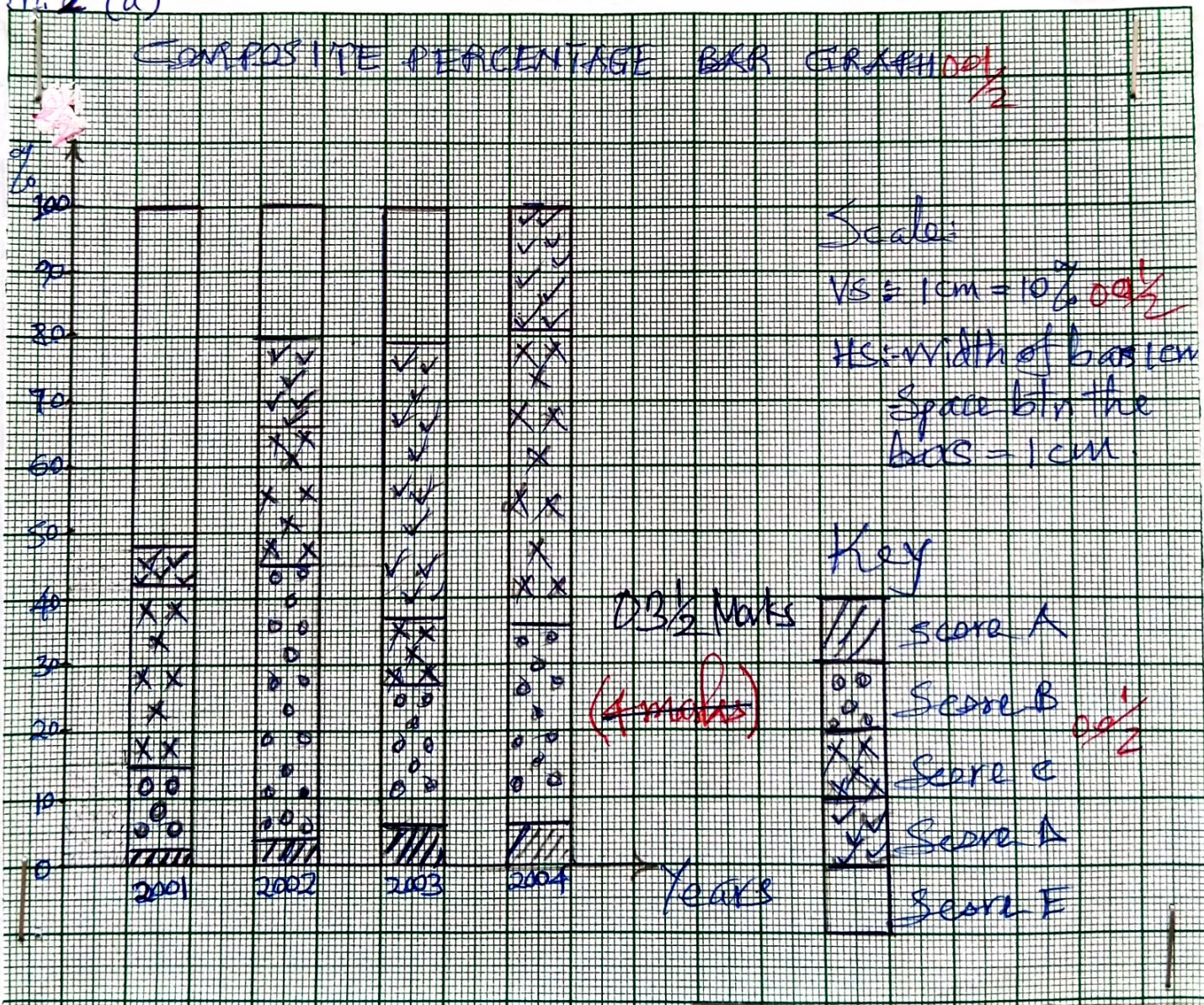
2. (a) Presentation of data by composite percentage graph
Cumulative percentage table.

Year	Score A	Score B	Score C	Score D	Score E
2001	1.8%	15.8%	41.8%	47.1%	100%
2002	3.3%	43.3%	66.6%	79.9%	100%
2003	6.3%	16.7%	37.5%	79.2%	100%
2004	6.1%	36.4%	81.9%	100%	100%

01 marks

only mark

Q2 (a)



2

b) Advantages.

- (i) It presents more than one item at once.
- (ii) It saves space as data drawn in subsequent layers.
- (iii) It gives good visual impression when different colour or shading is used.

@ 00½ mark.

Disadvantages

- (i) It does not present exact value of data.
- (ii) It is time consuming due to lengthy calculation.
- (iii) It requires mathematical skills hence hard to draw.
- (iv) It is difficult to interpret as data based on percentages.

@ 00½ mark.

c) Other statistical techniques.

(i) Multiple bar graph.

(ii) Multiple line graph

(iii) Compound line graph

(iv) Pie chart.

@ 00½ mark

TOTAL = 15 Marks

3.

i) Characteristics of the rocks

i) Dominant type of rock shown is the sedimentary rock because the eroded materials are seen in layers (strata)

ii) Characteristics

- Rock contain layers
- They contain fossils
- They can ^{undergo} metamorphism process
- They are non-crystalline

Any 3 points 03 marks @ 1

iii) These rocks are formed by the deposition of the eroded materials transported by wind, moving ice, moving water, waves and drifts. They are the result of continued erosion, transportation and deposition. Not only these but also compaction and cementation of sediments. They are in form of layers (2 marks)

iv) Uses of sedimentary rocks.

- Used for fuel like coal and oil.
- Used for construction purposes eg limestone, and sandstone
- Used for manufacturing chemicals. Some rocks contain salts like the nitrates or phosphates

Any 3 points (3 marks @ 1)

3 b) Flying height (H) = 1.6 km.
Focal length (f) = ? (01 mark)
Photo scale 1:50,000

Formula:
$$\text{Scale} = \frac{\text{Focal length } (f)}{\text{Flying height } (H)} = \frac{1}{50,000} = \frac{f}{1.6 \text{ km}}$$

Convert 1.6 km into mm.

$$\text{If } 1 \text{ km} = 1,000,000$$

$$\frac{1 \text{ km}}{1.6 \text{ km}} = \frac{1,000,000 \text{ mm}}{x}$$

$$x = 1,600,000$$

$$\frac{50,000 f}{50,000} = \frac{1,600,000}{50,000} = 3.2 \text{ mm}$$

$\therefore$ Focal length = 32 mm. (02 marks)

TOTAL = 15 Marks

4. Introduction

Any good explanation about soil, - 01 Mark

Main body,

Soil is considered / termed as a living entity due to the following reasons / facts.

- (i) Soil is made from parent rock (Mother rock) which gives the nature and the origin of soil.
- (ii) Soil can be created and destroyed through poor/bad methods of farming and improved by proper farming techniques - similar to living entity (living organism)
- (iii) Soil passes through different processes i.e simple and complex processes in its formation similar to living organism.
- (iv) Soil undergoes time in its formation, The longer the time the mature the soil
- (v) Soil is made up of soil water, (25% of total volume of soil water comes from either rain, rivers or ocean, similar to living organism where 75% of their body is water).
- (vi) It is made up of soil air, it covers about 25%
- (vii) It is made up of soil temperature similar to human body

Any 6 points @ = 03 Marks = 18 Marks

Conclusion: Any relevant and good conclusion - 01 Mark

TOTAL = 20 Marks

5

Introduction.

Description on Continental drift theory, = 01 Marks

Mainbody.

Critiques of the theory of Continental drift. (weakness of Continental drift theory).

- (i) Not all parts of continents can undergo jig-saw fit.
- (ii) Wagner failed to show specific causes and mechanism of Continental drift theory.
- (iii) He failed to explain the mechanism to the formation of glacial in hot climate.
- (iv) The plants and animals may be transported from one part to another through agent of transportation like water.
- (v) Wagner criticized on the frost action of lithosphere from solid object of jima.
- (vi) Wagner was not a geologist, he was meteorologist by profession.

Any 6 points @ = 03 Marks = 18 Marks

Conclusion - Any good conclusion = 01 Marks

TOTAL = 20 Marks

6.

Introduction.

Explanations about concepts of saltiness of the oceans and seas. = 01 Mark.

Main body.

Factors for variations of saltiness of the ocean and seas.

- (i) Amount of fresh water from rivers and melting ice.
- (ii) The rate of evaporation
- (iii) Amount of rainfall.
- (iv) Human activities
- (v) Ocean currents
- (vi) Direction of prevailing wind.
- (vii) Biological activities

Any 6 points @ = 03 Marks = 18 Marks

Conclusion: Any good and relevant conclusion = 01 Mark

TOTAL = 20 Marks

7. Introduction.

Explanations on the concept of atmospheric insolation
(Insolation is the amount of solar radiations reaching the earth's surface). — 01 Mark.

Main body,

Factors affecting/influencing rate of insolation)

- (i) Amount of solar output
- (ii) Solar altitude
- (iii) The effects of atmosphere/transparency of atmosphere
- (iv) Nature of the surface
- (v) Elevation and aspect.
- (vi) Latitudinal location.
- (vii) Distance of the sun and the earth.
- (viii) Length of the day.

Any 6 points @ = 03 Marks = 18 Marks

Conclusion: Any relevant conclusion — 01 Mark

TOTAL = 20 Marks