CHRISTIAN SOCIAL SERVICES COMMISSION
An Ecumenical Body of Tanzania Episcopal Conference and Christian Council of Tanzania
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CSSC SOUTHERN HIGHLAND ZONE, FORM FOUR CSSC JOINT MOCK EXAMINATION 2025
FORM FOUR GEOGRAPHY MARKING SCHEME

SECTION A (16 MARKS)

1. **Multiple choice @1marks = 10 marks**

i.	ii.	iii.	iv.	v.	vi.	vii.	viii	ix.	x.
C	B	A	E	C	E	A	E	D	C

2. **Multiple choice 1 marks = 6 marks**

i.	ii.	iii.	iv.	v.	vi.
A	B	C	D	E	F

SECTION B: (54 marks)

3. (a) **Four geomorphological activities shaping the landscape. 0.5 mark @= 02marks**

   (i) **Erosion** it involves the removal of surface materials .On this map, erosion is typically reflected in river channels and along the coast of water body found at eastern side of the map. Where the land has been worn down over time.

   (ii) **Deposition** it occurs when eroded materials are dropped in new locations. On a map, there is broad, flat areas including mangrove swamps at eastern side indicating regions where deposition has occurred.

   (iii) **Volcanic Activity.** This activity creates landforms such as volcanoes, this might be indicated by a conical hills, at North West of the map and Upwa Island at eastern side of the map, showing where eruptions have built up landforms.

   (iv) **Mass Wasting (Landslides)** Mass wasting is the downward movement of rock, soil, and debris under the influence of gravity. On topographical maps, steep slopes or areas marked by presence of hills as depicted at northern side of the map.

b) **The factors that determine the nature of settlement patterns.**
0.5 marks @= 2.5 marks

   (i) **Topography (Relief and Landforms):** People prefer to settle in areas with flat land for easy construction and agriculture, such as river plains or coastal areas. In contrast, mountainous and hilly areas often have sparse settlements due to difficulty in construction, farming, and transportation. In this map most of the people have been attracted to live in gently sloping areas such as northern and southern side of the map.

   (ii) **Climate:** The climate of an area plays a major role in settlement patterns. The area has good climate as located at tropical climate evidenced by latitude of $4^0 40''0's$

   (iii) **Availability of Water:** Water is essential for drinking, agriculture, and industry. Settlements tend to form near rivers, lakes, or coastal areas where water is readily available. In this map people have settled near water bodies as shown at eastern, northern, western side of the map where rivers and other water bodies are available.

(iv) **Soil Fertility and Agriculture:** Areas with rich, arable soil attract larger populations, especially in agricultural societies. Evidenced at northern side of the map where there is scattered cultivation.

(v) **Transportation and Accessibility:** The availability and development of transportation routes like roads, play a critical role in settlement patterns. People have settled in areas that are easily accessible for trade, communication, and movement. Evidenced where there is road on the map like on western side of the map.

c) Procedures for measuring trend and alignment 0.5 marks @= 2.5 marks
   i.   Identify the two points;
   ii. Join the two points with a straight line
   iii. Note the middle point of the line;
   iv. Draw a North direction on the noted point (middle point); and
   v.   Measure the angles and give their degrees.

d). with vivid examples, determine the functions of vanga sub-urban. Marks @= 02 marks
   i.   Tourism center due to presence of Upwa island at eastern side of the map
   ii. Farming center due to presence of scattered cultivation and sisal estates at southern and western side of the map
   iii. Lumbering center due to presence of forest at eastern side of the map
   iv. Fishing center due to presence of a lot of rivers and large water body ar eastern side of the map.
        TOTAL MARKS = 09 marks

4. a). To present the given data by using compound line graph.**(3.5 marks)**
   COMPOUND LINE GRAPH TO SHOW CROP PRODUCTION FROM 2011 TO 2016.
   Tabulation = (1marks)

Table 5(b): *Preparation of a compound table*

Year/Crops	Sisal	Cotton	Coffee	Tea
2011	113	113+42	113+42+53	113+42+53+14
2012	104	104+67	104+67+45	104+67+45+17
2013	92	92+50	92+50+53	92+50+53+17
2014	81	81+56	81+56+49	81+56+49+18
2015	86	86+60	86+60+48	86+60+48+17
2016	74	74+59	74+59+67	74+59+67+10

Table 5(c): *Cumulative table showing total value of each crop*

Year/Crops	Sisal	Cotton	Coffee	Tea
2011	113	155	208	222
2012	104	171	216	233
2013	92	142	195	212
2014	81	137	186	204
2015	86	146	194	211
2016	74	133	200	210

TITTLE: COMPOUND LINE GRAPH TO SHOW CROP PRODUCTION FROM 2011 TO 2016. (0.5marks)

Graph (3.5marks)
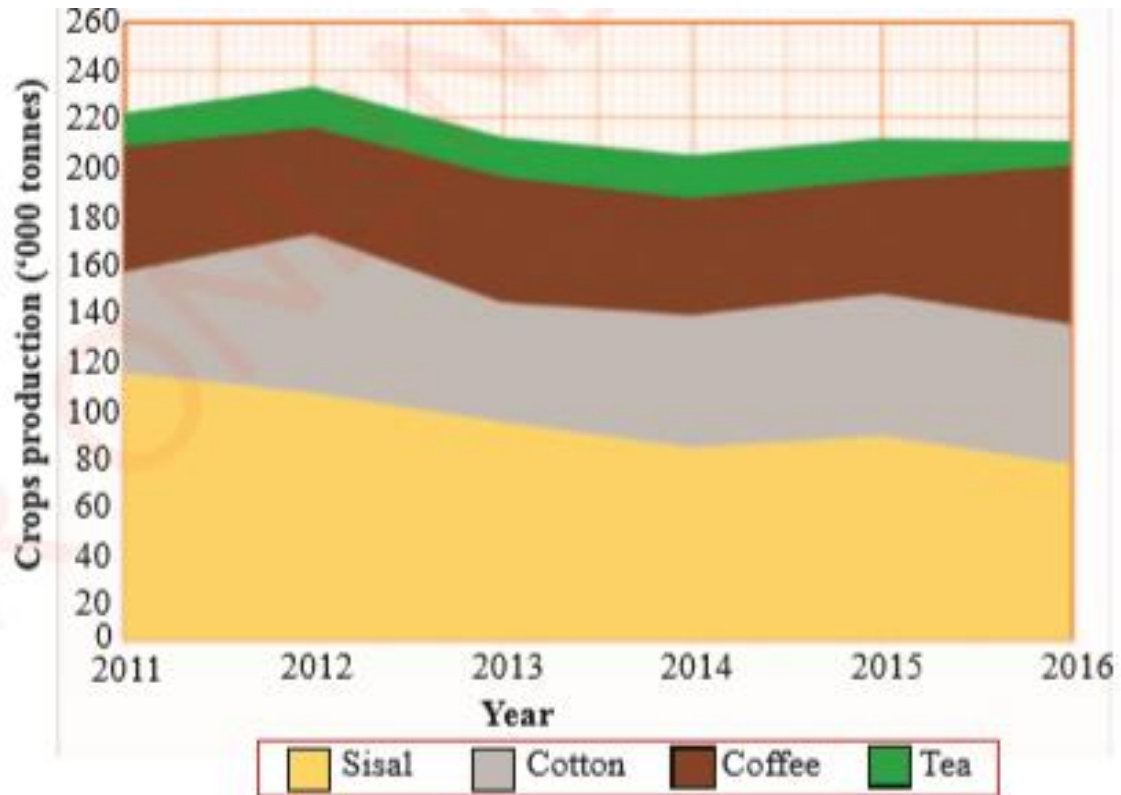
Scale: Horizontal scale 2cm to 1 year; Vertical scale 1cm to 20 000 tonne

(b) **Advantages of a compound line graph (@0.5=1mark)**

   i.   A compound line graph enables easy comparison of values.
   ii. It does not consume much time because several lines representing each independent variable are combined.

Disadvantages of a compound line graph (@0.5=1mark)

   i.   A compound line graph is hard to read and interpret, as well as to choose a suitable scale when data differs by a great magnitude.
   ii. It can cause confusion when many variables are cumulative and not all values start from zero.

(c**) Trend of the production (@0.5mark)**

The trend of production is fluctuating from one year to another year

 (d) **Significances of statistical data to the users (@0.5marks =2marks)**

   i.   Statistical data is used in land planning, resources allocation and provision of social services.
   ii. Such data is also used in forecasting future trends of geographical phenomena and comparison and explanation of different geographical phenomena. For example, a study of climatic data of an area could enable one to explain the existence of certain types of vegetation.
   iii. Raw and bulky data is simply summarized by statistics for easy interpretation and explanation.
   iv. Moreover, statistics enables us to convert massive data into a simple and manageable form by using measures of central tendency and dispersion for study purposes

5. **(total marks =9 marks)**
  a) The step is **hypothesis formulation** (**1marks**)

  b) Types of hypothesis (@1marks =2marks)
i. *The alternative hypothesis*: This suggest the existence of relationship between variables of the study. For example drought (climate) is the cause of food shortage in Dakawa-Dodoma. Here, the variables of study are drought and food shortage.
ii. *The null hypothesis:* This is a statement which suggests nonexistence of relationship between the variables of the study. It is stated as a negation to the alternative hypothesis. Example, drought (climate) is not the cause of food shortage in Dakawa.

  c) Importance of hypothesis (@0.5marks =2marks)
  i.   It guides the researcher by limiting the area of research
  ii.   It indicates the type of data required
  iii.   It defines which facts are relevant and which one are not
  iv.   It determine the most appropriate technique of data analysis

  d) Characteristics of good hypothesis (@0.5marks =2marks)
  i.   It should be simple, clear but not obvious
  ii.   It should be precise
  iii.   It should be testable
  iv.   It should be able to indicate the relationship between variables.

  e) Ethical issues a researcher must observe during data collection   (@0.5marks =2marks)
  i.   receiving research clearance from the authorities
  ii.   The researcher must ensure confidentiality of respondents or informants
  iii.   The researcher should protect the respondents physically and psychologically while informing them about the aim and nature of the research and the inherent risks if any.
  iv.   the information collected should not be used for the purpose other than the intended one

6. **(total marks =9 marks)**
  (a) Obstacles that do not obscure visibility and may be walked around. E.g... *Ponds, wells* etc. (0.5 marks)
  (b) Right angle method. This method is applicable to those obstacles which do not obscure visibility but obstruct chaining across it (01 marks)
  (c) **Procedures** (0.5 @marks=2.5) + 2 marks for diagram = 4.5 marks
    i.   Fix a ranging pole at a starting point (A), then walk around and put another ranging pole at point (B) along the survey line to make a straight chain line AB;
    ii.   Insert a ranging pole at C and F along the survey line AB;
    iii.   From point C and F establish a perpendicular line CD and FE at right angle to avoid the obstacle;
    iv.   From point D develop a line DE at right angle to avoid the obstacle;
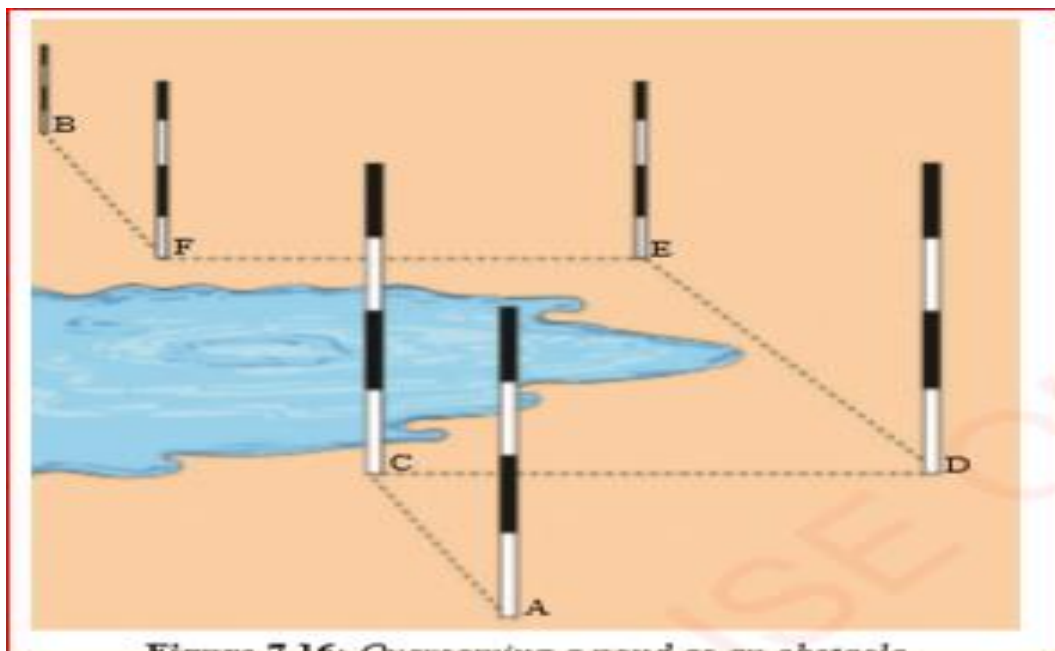   v.   Thus, the distance of line DE =FC.

Figure 7.16: Overcoming a pond or an obstacle

d. Instruments that can be used to take linear measurement are,(1@=3marks)

      i.   Chain- used for taking linear measurement.

     ii.   Tape measure-used for taking linear measurement.

    iii.   Surveyor's band- Used for taking linear measurements.

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7. a) (i) Five Possible Causes of Soil A Having More Moisture than Soil B
   (01 mark @=05 marks)

   i.   <u>Soil Texture</u> – Soil A may have more clay content, which retains more moisture compared to sandy soil (Soil B) that drains water quickly.
   ii. <u>Organic Matter Content</u> – Soil A may contain more organic matter (e.g., humus), which improves water retention.
   iii. <u>Soil Structure</u> – Soil A might have a well-aggregated structure that holds water better, while Soil B may have loose particles that allow water to drain faster.
   iv. <u>Vegetation Cover</u> – More plant cover in Soil A reduces evaporation and enhances moisture retention, whereas Soil B may have little or no vegetation.
   v.   <u>Topography</u> – If Soil A is located in a low-lying area, it may collect more water compared to Soil B, which may be on a slope where water runs off quickly.
   vi. <u>Climate Conditions</u> – Soil A might be in an area with higher rainfall or less evaporation compared to Soil B.

(ii) Four Importance of Soil Moisture (01 @ = 04 marks)

   i.   Supports Plant Growth – Provides essential water for plant uptake and survival.
   ii. Microbial Activity – Maintains a suitable environment for beneficial soil microorganisms.
   iii. Soil Fertility – Helps in the breakdown of organic matter, releasing nutrients for plant growth.
   iv. Prevents Soil Erosion – Moist soil binds particles together, reducing erosion by wind or water.
   v.   Regulates Soil Temperature – Moisture helps in maintaining moderate soil temperatures, protecting roots from extreme heat or cold.
   vi. Enhances Water Availability – Improves water infiltration and storage, ensuring plants have access to water during dry periods.
       Total = 09 marks

   (b) a) Properties of soil (@1marks =4marks)

i.   Soil porosity

Is the total amount of pores spaces in a soil the pores water. Soil porosity depends on the soil structure and soil textures. Soil with fine particles have small pores and vice versa

ii.   Soil color

This is the most obvious characteristic of soil. From soil color it is easy to tell how a soil has been formed, its contents as well as its fertility. For example, a soil which is dark in color is rich in humus, while red color indicates the presence of ferrous minerals.

iii.   Soil texture

This refers to the coarseness or fineness of a soil, relative to the size of individual particles. These particles can be classified according to their size, from gravel, sand, silt to clay.

iv.   Soil structure

Soil structure is the appearance of soil by arrangement of individual soil particles within the soil or the way soil grains are grouped together to form larger pieces of aggregates.

(b) Importance of soil texture in human production (@0.5marks =2marks)

    i.   it influences soil porosity, permeability, structure
    ii.   It influences plant growth and root penetration
    iii.   It influences the cultivation during agricultural activities
    iv.   It influences water retention capacity

(c) Importance of humus (@0.5marks =1marks)

    i. It influence soil color
    ii. It influence soil fertility

8. a) **Type of Photograph.**
    The type of photograph described is a **Vertical or Aerial Photograph. 01 marks**

b) **Strength of the Photograph Over Maps in Obtaining Field Information**
The strength of vertical aerial photographs over maps in obtaining field information include: **0.5 mark @= 03 marks**

- Realistic representation: Aerial photographs show the actual appearance of the terrain and its features, which can help in better visualizing and understanding the area.
- Detail: They provide more detailed and accurate information, especially in areas with complex or dynamic features, such as buildings, roads, and vegetation.
- **Up-to-date:** Aerial photographs can be taken frequently, providing current information about the land and its use, while maps might become outdated over time.
- **Direct observation**: They allow for direct observation of the area, capturing details that might be omitted or generalized in maps.
- Photographs are less expensive to produce and they are faster to take
- Photographs require little knowledge on using the camera
- **Ease of Interpretation:** Photographs are often easier for the general public to understand. Maps may require specific knowledge of map reading, such as understanding scale, legends, and topographical features.

- Photographs are used to keep record of events such as volcanic eruptions, floods, impacts of earthquakes, effects of mass wasting and other events
- Photographs can accommodate many images outside the human reach. Photographs can bring information from remote areas where people cannot reach, for example, beyond the moon, in large thick forests and from the bottom of the ocean

c) **Elements of Photograph Interpretation**   **0.5 marks @= 03 marks**
Six elements of aerial photograph interpretation that can be identified are:

- **Tone/Color:** The variation in light and color on the photograph helps in identifying different features such as vegetation, water bodies, and land usage.
- **Texture:** The texture, or pattern of features, provides insight into the characteristics of the ground, such as smooth or rough terrain, forests, or agricultural land.
- **Shape:** The shapes of natural and human-made features (e.g., buildings, rivers, roads) help in identification and differentiation.
- **Size:** The size of objects or features in the photograph can help in estimating distances, area coverage, and relative proportions.
- **Pattern:** Repeated patterns (e.g., agricultural fields, roads) can help in identifying human influence or natural formations.
- **Shadow:** The direction and length of shadows in the photograph can help determine the time of day, as well as the height of objects, offering insight into the terrain's elevation.

d) **Sections of the Photograph**   **01 mark @= 02 marks**
Three sections of the aerial photograph that can be identified are:

- **Central Section:** Least distorted part of the image (near the photo's center).   Scale is most accurate here.   **01 mark**
- **Left section/ Edge Section**: Scale decreases toward the edges.   **0.5 marks**
- **Right section/edge** Scale decreases toward the edges.   **0.5 marks**
  Total = 09 mark

SECTION C (30 Marks)
Answer **ONLY TWO** questions in this section
9. **INTRODUCTION**
✓ any relevant introduction(1.5marks)
MAIN BODY
A student has to describe the Problems associated with ageing population
- Retardation of development
- Reduction of workers mobility
- Underutilization of resources
- Consumption pattern changes
- Increases of government expenditure   (@2.5marks=12.5 marks)
CONCLUSION
✓ any relevant conclusion (1mark)
Total marks =15marks

10. **Introduction** **1.5 marks**

Any relevant Concept of energy crisis

Main body (**02 marks @= 06 marks**)

A student has to describe the Measures to Avoid Energy Crisis Problems:

- Investing in Renewable Energy: Governments should invest in renewable energy sources like solar, wind, hydro, and geothermal power, which are more sustainable and have less environmental impact.
- Energy Efficiency Programs: Implementing energy efficiency programs in industries, homes, and public services can help reduce overall energy demand, which can alleviate pressure on energy supplies.
- Improving Energy Storage Technologies: Developing and deploying energy storage systems like batteries will help manage the intermittent nature of renewable energy and ensure reliable supply during peak demand periods.
- Public Awareness Campaigns: Educating the public on energy conservation and the importance of sustainable energy can help reduce wasteful consumption and create a culture of energy-saving practices.
- Promoting Investment in Energy Infrastructure: Governments should prioritize upgrading existing energy infrastructure, ensuring that energy is efficiently produced and distributed, reducing waste, and preventing system breakdowns.
- **Regional Cooperation:** Developing countries can benefit from regional cooperation in energy production and distribution. Shared resources and cross-border energy grids can help manage supply issues and reduce costs.
- **Strengthening government Policy**: Developing countries need to implement and enforce policies that encourage energy security, including energy pricing regulations, subsidies for clean energy, and incentives for private sector participation in energy development.
  - ➢ **Conclusion**
    Any relevant conclusion **1.5 marks**
    Total marks =15marks

11. **Introduction**
    Any relevant introduction (2marks)
    - ➢ **Main body**
    A student has to describe the challenges facing people who are employed in agriculture sector ((**each point in the main body caries 2marks**) with six points
      - Price fluctuation on agricultural products
      - No formal taxation
      - Poor road infrastructures from forms to the markets
      - Unreliable markets
      - Climatic change
      - Inadequate fund and capital to initiate farms expansion.
    - ➢ **Conclusion**

Any relevant conclusion **2marks conclusion**

Total marks =15marks