

**CHRISTIAN SOCIAL SERVICES COMMISSION  
CSSC-SOUTHERN ZONE FORM FOUR JOINT EXAMINATION**

**013**

**GEOGRAPHY-PROPOSED MARKING SCHEME-2024**

QN.01. Multiple choice question

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
B	C	C	E	C	B	B	B	C	E

**01 mark @ = 10 marks**

QN. 2

Question	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Answer	D	B	F	C	A	E

**01 mark @ = 6 Marks**

**SECTION B**

QN. 3

(a) Solution

Map distance = 15cm

Map scale = 1:50000

Actual distance = ?

From the given map scale (R.F 1:50000 = S.S 1 cm to 0.5km)

1 cm = 0.5km

15cm = x

X = 7.5 km

The length of railway from grid reference 120128 to 050119 is 7.5km. **2marks**

(b) Full square = 03

Half square = 05

Full square + half square

2

$$03 + \frac{5}{2}$$

03 + 2.5

5.5 squares.

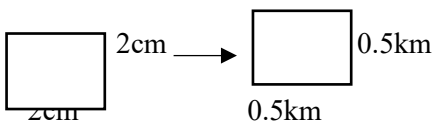
**0.5 mark**

From

1cm =  $\frac{1}{4}$  km

2cm = ?

X = 0.5km.



A = s x s

= 0.5km x 0.5km

**0.5 mark**

**Area of one grid square = 0.25km<sup>2</sup>**

1 square = 0.25km<sup>2</sup>

5.5 square = x

X = 1.375km<sup>2</sup>

The area covered by forest west of gridline 120 is 1.4km<sup>2</sup> **1 mark**

- (c) ECONOMIC ACTIVITIES @ 0.5 mark = 1.5 marks
- (i) Agriculture activities due to the presence of scattered cultivation
  - (ii) Transportation activities due to the presence of railway
  - (iii) Lumbering activities due to the presence of forest at north east

(d) 1:50,000  
 1km = 100,000cm  
 X = 50,000cm  
 1cm = 0.5km

One centimeter on the map represent a half kilometer on the ground. **1.5marks**

(e) The type of transport in the map is land transport.  
 Evidence: due to the presence of rail and roads **1 mark**

- (f) Method used to show relief are
- (i) Contour line at the whole map.
  - (ii) Trigonometric station at a grid reference 126084 @ 0.5 mark = 1 mark

**QN. 5**

(a) Mean

$$\begin{aligned}
 X &= \frac{\sum X}{N} \\
 &= \frac{3000 + 2900 + 5000 + 2300 + 1800 + 4000}{6} \\
 &= \frac{19000}{6} \\
 &= 3166.7 \sim 3167
 \end{aligned}$$

The mean production of wheat = 3167 **1 mark**

(b) To prepare cumulative of deviation. **1 mark**

<i>Year</i>	<i>Wheat</i>	<i>x</i>	<i>d(x - x)</i>
<b>2011</b>	3000	3167	-167
<b>2012</b>	2900	3167	-267
<b>2013</b>	5000	3167	1833
<b>2014</b>	2300	3167	-867
<b>2015</b>	1800	3167	-1367
<b>2016</b>	4000	3167	-833

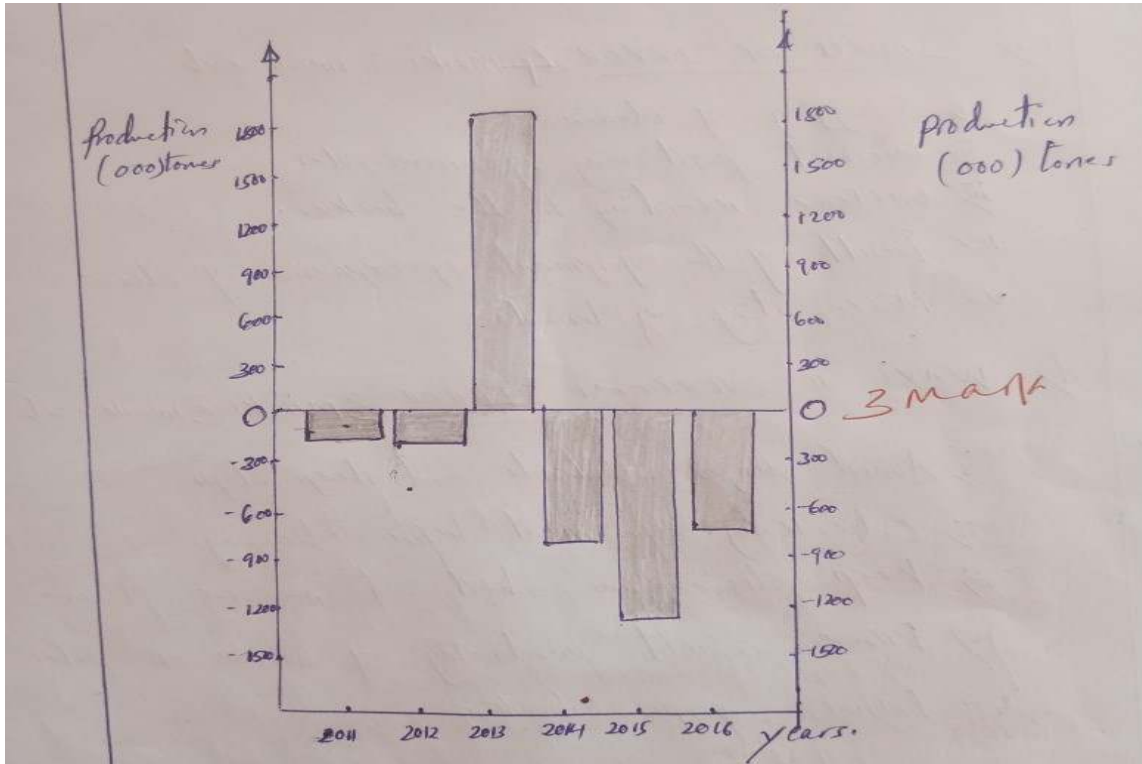
**A DIVERGENCE BAR GRAPH SHOWING WHEAT PRODUCTION IN “000”TONNES**

1/2 mark

Scale

V.S 1cm - 300 tones.  
H.S 1cm – 1 year

1/2 mark



(c) **MERITS**

- (i) Easy to make comparison @ 0.5 mark = 1 mark
- (ii) Have good visual

**DEMERITS**

- (i) Involve only one item
- (ii) Involve calculations. @ 0.5 mark = 1 mark

(d) Reasons for variation in crops production

- Pests and diseases
- Climatic change @ 0.5 mark = 1 mark

QN. 5

- a) Hypothesis formulation = 1 mark
- b) Significance of Hypothesis formulation
  - it helps to define research problem
  - it enables the researcher to collect data that either support the hypothesis or reject
  - it states the researcher's expectations concerning the relationship between the variables in the research problem 1 mark @ total 3 marks
- c) qualities of Hypothesis formulation

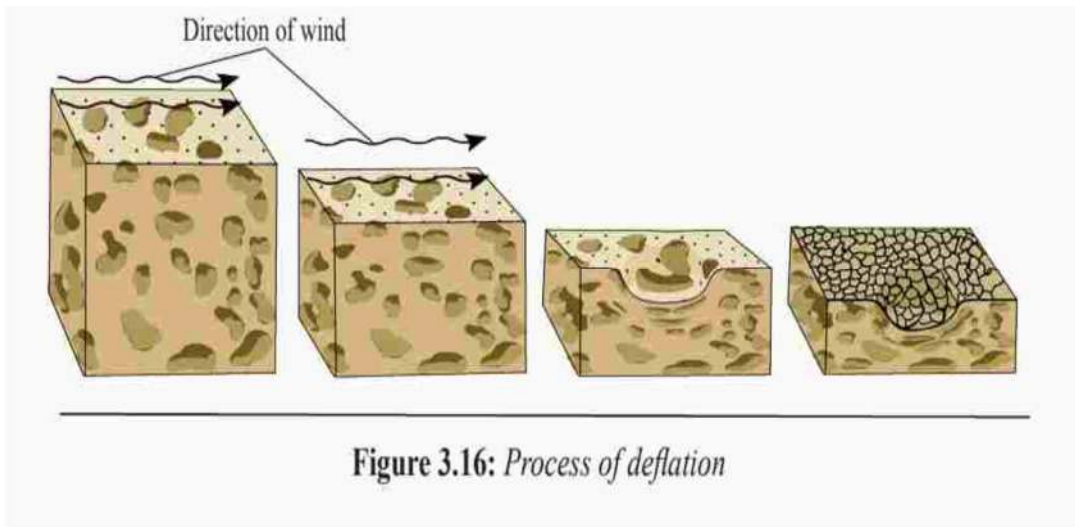
- it should be very specific and limited to the study in hand.
  - It should precisely state the relationship between factors
  - It should be very verifiable (able to be tested or supplied by evidences) *1mark@total 3marks*
- d) Problem facing researcher during Hypothesis formulation
- Absence of clear theoretical frame work
  - Lack of ability to utilize theoretical framework
  - Lack of experience
  - Lack of acquaintance with available research techniques *1mark@total 2 marks*

QN. 6

- (a) The type of the discrepancy the surveying team encountered is gross error (*1mark*)
- (b) The three things the survey team supposed to consider that they would have avoided such discrepancy are (*01 mark @= 04 marks*)
- Before undertaking any survey, the chain should be checked and repaired for any damage.
  - avoid steep slopes and major obstacles
  - Keeping chain lines short and measuring them accurately
  - Calling out measurements to a booker as clearly as possible and asking them to repeat minimizes errors
  - The chain should not be allowed to budge
  - To ensure correct positioning of errors or poles
  - Proper booking, detailed note booking and making neat sketches and drawings
- (c) Good booking methods during surveying process. (*01 mark @= 04 marks*)
- All linear measurements should appear at the center of the column and it has to state from the bottom upwards
  - All offsets and ties must be shown on the side they appear along the survey line.
  - Features at the right-hand side must be recorded on the right –hand side while those at the left hand side must be recorded on the left –hand side of the column.
  - Clear records keeping. Use standardized symbols and labels to represent different features and measurements

QN. 7

- a) **Wind actions-** wind actions of transportation, erosion and deposition are what cause the formation of different attractive and very beautiful views in desert areas. ....*1mark*
- b) Factors affecting wind erosion in desert**
- (i) The strength and speed of the wind determine the distance and size of the load transported
  - (ii) Obstacles in a path of the wind affect the wind movement
  - (iii) Nature of the load transported.....*1 each total 2 marks*
  - (iv) The presence of vegetation cover affects the movement of wind
- c) Three erosional processes by wind in the desert are**
- (i) Deflation- is the removal of the soil and other fine materials on the desert by wind leaving behind hollows or depression



***1each total 3marks***

- (ii) **Abrasion**- the erosive process by using a load carried by the wind/ is the hammering action by the load carried by the wind. It cause to the formation of features like rock pedestals, zeugens, yardangs and ventifacts.
- (iii) **Attrition**- the erosive process by which the materials carried by the wind as they collide against each other hence the reduction in sizes of the material themselves.

**d) Feature formed by wind erosion (2)**

**Student should explain and provide diagram**

- (i) Rock pedestals
- (ii) zeugens
- (iii) Yardangs
- (iv) Deflation hollows.....***1.5 each total 3marks***
- (v) Inselberg

QN 8. (a) The type of photograph above is oblique photograph. ***(01 mark)***

Reasons ***(0.5 @=2 marks)***

- Covers large area
- Horizon is included
- Three views including top, front view, and side view
- Size of objects shown on the photograph are decreasing from the position of camera man to back ward

(b) Settlement pattern of the photographed area. ***(01 mark)***

- Nucleated settlement patterns as buildings are closely compacted each other.

(c) 3 possible factors that might have contributed to the advancement of the

Area ***(01 mark@= 03 marks)***

- Water sources
- Infrastructure
- relief
- government policies
- economic opportunities

(d) Four advantages of vegetation on the area. *(0.5 mark@= 02 marks)*

- Improved air quality
- Temperature regulations
- Enhanced Aesthetics. Enhance the visual appeal of city making the area more attractive to live and visit
- Biodiversity support
- Storm water control
- Provide shading
- Prevent soil erosion

**Total = 09 marks**

QN. 9.

- Introduction ( forest) *1.5 marks*

- Main board *(02 marks @= 12 marks)*

Addressing challenges facing forest resources

- ✓ Reforestation and reforestation example programmes like HASHI and HADO
  - ✓ Improving tree harvesting practices in the forest such as selective cutting of trees where only mature or weak are removed.
  - ✓ Forest must be protected from natural hazards such as fires and pests through close supervision and use of watch towers and air patrol. Insects and pests must be prevented by regular inspection and spraying
  - ✓ To enact laws and regulations to prevent uncontrolled harvesting of trees. Example in Kilimanjaro region, no trees for timber can be cut without permission from local government authorities
  - ✓ Public awareness. people have to be educated on the importance of forest conservation. Through mass media, and public meetings.
  - ✓ Re-use, and recycling of waste papers. Example egg trays, packaging boxes, toilet paper and newsprints can be made from recycled paper products
  - ✓ Alternative sources of energy may be adopted to reduce the speed of use of forest resources. For example, the use of solar energy, biogas, hydroelectric power, natural gas instead of fuel woods
- Conclusion. Any relevant conclusion such as importance of forest resources. Or negative impacts of depleting forest resource. *(1.5 marks)*

QN. 10

- Introduction ( loss of biodiversity *1.5 marks*)
- Mainboard (Causes for the loss of biodiversity)

Human causes *(02 marks @= 06 marks)*

- The construction activities
- Poaching
- Pollution
- Draining of wetlands

- Introduction of exotic species
- Deforestation
- Overfishing

Natural causes *(02 marks @= 06 marks)*

- Floods
- Drought
- Lightings
- Windstorms
- Pests and diseases
- Landslides
- Earthquakes
- Volcanic eruptions

➤ Conclusion any relevant conclusion. *(1.5 marks)*

QN. 11

➤ introduction – soil *2marks*

➤ Main body (physical properties of soil) *2marks@total 12marks*

- Soil texture
- Soil structure
- Soil porosity
- Soil colour
- Soil depth
- Soil permeability
- Soil catena

➤ Any relevant conclusion *1mark*