CHRISTIAN SOCIOL SERVICE COUNCIL (CSSC)
PRE-NATIONAL EXAMINATION
GEOGRAPHY I:
MARKING GUIDE

1. (A) Change 6.55km into cm
   1cm = ½ km

   X 6.55x2

   ½km x = 1 x 6.55 x 2= 13.1cm
   Measure 13.1cm from 920190

   The name of object is reference 892130 (03 Marks)

   (ii) Position of object using grid refence 892130 (03 marks)

(B) (i) Ground distance

distance = $\frac{speed}{Time}$ (01marks)

$$= \frac{30km}{4} \times \frac{16}{60}$$

$$\frac{30km/h}{16m}$$

$$\frac{480}{60}$$

Ground distance =8.1 km (02 marks)

(ii) Representative fraction (RF) scale

Scale = $\frac{map\ \ distance}{ground\ \ \ distance}$

$$\frac{10cm}{8.1\ km\ x\ 100{,}000}$$

R. F = $\frac{1}{81000}$(03 marks)

(iii) Scale = $\frac{10cm}{8.1\ km}$

$$\frac{1cm}{0.81\ km}$$

One centimeter on the map represents zero pointeight one Kilometer on the actual ground (03 marks)

(iv Linear scale

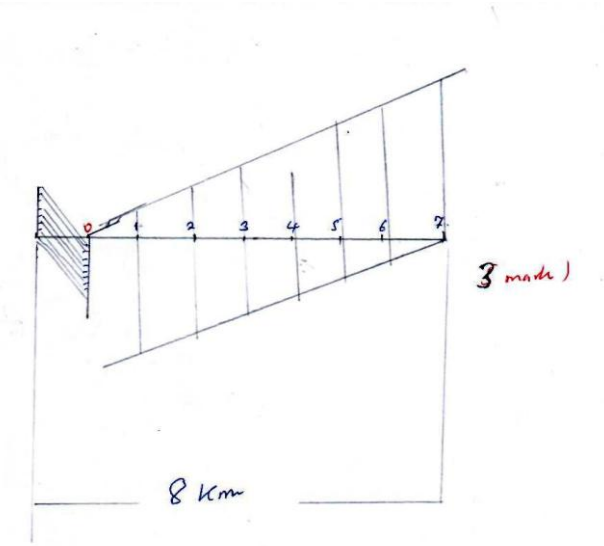
Base Line

If 1cm represents 0.81km

Then 1.23cm represents 1km

Therefore: 10cm represents 8.1km

Base line = 10cm (01 mark)



3 marks

C. Type of climate = Equatorial climate
Reason = Presence of many water bodies (01mark)
= Green vegetation (01mark)

D. i Fishing activities (01 mark)
ii. Business/trade (01 mark)
iii. Agriculture (01 mark)
iv. Irrigation(01 mark)

2. Calculate total

YEAR	PRODUCTION ("000") TONES	EXPORT ("000") TONES
2008	300	290
2009	315	300
2010	305	298
2011	355	313
2012	325	320
TOTAL	1600	1521

(II) To calculate radius square root total of each

R1 = $\sqrt{1600}$ = 40

R2 = $\sqrt{1521}$ = 39 (01mark)

Let 1cm = 10 unit

$\frac{40}{10}$ = R, = 4

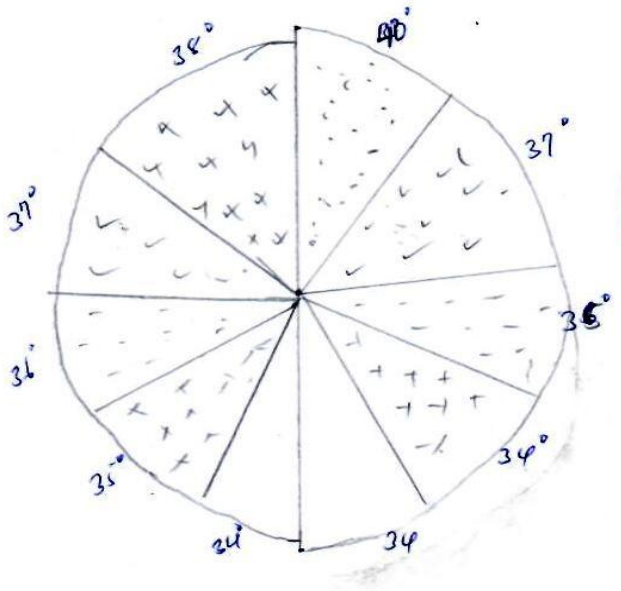
$\frac{39}{10}$= R_2 =3.9 (01 marks)

Change each unit into degree

YEAR	PRODUCTION	EXPO
2008	$^{300}/_{160}$X180 = 33.75^0	$^{290}/_{152,}$X180 =34.91^0
2009	$^{315}/_{1600}$X1800^0= 35.43^0	$^{300}/_{1521}$X1800 =35.52^0
2010	$^{305}/_{1600}$X1800 =34.31^0	$^{298}/_{1521}$X 180 =35.26^0
2011	$^{355}/_{1600}$X1800 =39.93^0	$^{313}/_{1511}$X1800 =39.93^0
2012	$^{325}/_{1600}$X1800 =36.56^0	$^{320}/_{11521}$X180 =37.86^0

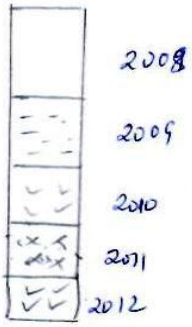
(01 marks)

SUNFLOWER PRODUCTION & EXPORT IN SINGIDA REGION



(03 marks)

Key:



(04 marks)

(B) Candidate has to differentiate given terms

i. Inferential statistics deals drawing conclusion from Sample WHILE descriptive statistics deals with summarized collected data from the field

ii. Primary data is original information from field WHILE secondary data is data already collected from other written documents

iii. Dependent variable is variable whose changes depends on other factors while independent variable is the one which changes independently

iv. Measure of central tendency is the set of values which live central within data set organized in accordance to magnitude eg. Mean, mode, median: While measure of dispersion is measurement taken in reference to the mean of data. Eg. Standard deviation (08 marks) @ 02 marks

3. (a) Student is asked to differentiate the following terms:

(i) Principal point: is the area I the ground where the camera is focused WHILE focal length: is the distance from the camera axis to the film.

(ii) Flying height: is the distance from the ground to the camera axis WHEREBY flight line: is the point of aircraft that takes picture in uniform distance from the ground.

(iii) Datum: is the mean sea level which indicates the elevated part of the ground WHILE mosaic: is the overlapping area which occur during the process of taking picture. This occurs when the same area is indicated by more than one picture.

06 marks (02 marks @)

(b) Photo scale = 1:20000
Flying height of craft (H) = 3200m
Height of object (h) = 1400m
Focal length (f) =?

$PS = \frac{F}{H-h}$ (01 mark)

$\frac{1}{20,000} = \frac{f}{(3200-1400)m}$

Change m into a
1m =1000m
Change m into a
1m = 1000m
1800 =x
1800000 (01 mark)

$\frac{20,000F}{20,000} \frac{1800000}{20000}$

f= 90mm
the focal length = 90mm (03 marks)

(c) (i) Scenario discovered is Photo scale distortion (01 mark)
(ii) Causes of photo scale distort
- Image displacement
- Distortion of size of scale
- Non uniformity coverage of ground (03marks)

4. Introduction

Any relevant meaning of air mass (02marks)

Four (4) General characteristics of air mass

i. Air mass originate from homogenous surface like ocean, desert etc
ii. Air mass are always on motion
iii. It covers large area
iv. Direction of air mass depend on barometric gradient
v. Any other relevant point (02marks @ marks)

Four (4) principle types of air masses

i. Polar maritime (Pm)
ii. Polar continent (Pc)
iii. Tropical maritime (Tm)
iv. Tropical maritime (Tc)
vi. Equatorial maritime (Em) (02marks @ marks)

Conclusion
Any relevant conclusion (02marks)

5. Introduction
   Candidate has to define soil colour (02 marks)
   Main body
   Four source of soil colour (02 marks each)
   i. Mineralogical composition
   ii. Organic matter content
   iii. Moisture content in the soil
   iv. Temperature of an area
   Importance of soil colour (02 marks each)
   i. It influences microbial activities
   ii. It is crucial I understanding the climate of an area
   iii. It determines the fertility of soil
   iv. It regulates heat/ determines the temperature holding capacity of soil
   v. Helps in selection of crops to be grown
   vi. Used in classification of soil
   Conclusion
   Any relevant conclusion (02 marks)

6. Introduction
   Artesian basin is basin formed when permeable rock lay between two layer of impermeable rocks such that they form shallow syncline
   (03 marks)
   Main body
   Condition for formation of artesian basin
   i. Presence of permeable rock laying between two impermeable rock
   ii. Permeable rock should be exposed in area of sufficient precipitation
   iii. Basin must be deep toward region
   iv. There must be partial or total blockage of exist
   v. Sufficient water to provide an adequate supply of underground water
   (03 marks in each point)
   Conclusion
   Any relevant conclusion (02 marks)

7. Introduction
   Plate tectonics is large movement of Earth lithosphere (03 marks)
   Main body
   Evidence of plate tectonic theory
   I. Formation of new oceanic crust
   II. Presence of fold mountains
   III. Occurrence of volcanism along plate margins
   IV. Widening of atlantic ocean basin
   V. Narrowing of sea floor like miditeranian
   VI. The presence of transform fault (2.5 marks per each poit)

   Conclusion
   Any relevant conclusion (02 marks)