

# GEOGRAPHY 1

## MARKING GUIDE

### SECTION A (40 Marks)

1 @ Determinants of climate in this map

- i. Latitude
- ii. Vegetation
- iii. Altitude

@ 1 mark = 3 marks

Note :- These criteria in this map show that the climate is Tropical climate

(b) Solution

$T_1$  = March 2015

$T_2$  = April 2019

$M_v1 = 9^\circ 47'$

$M_v2 = ?$

$R_c = 2$  minutes per annum negatively

01 mark

The difference in time =  $T_2 - T_1$   
= 2019 (April) 4 - 2015 (February) 2  
= 4 years 2 months

- - 01 mark

∴ The difference in time is 4 years and 2 months

The total magnetic variation can be obtained by taking

1 year = 2 minutes

4.2 years = ? x

$$\frac{1 \text{ year } x}{1 \text{ year}} = \frac{4.2 \text{ years} \times 2 \text{ minutes}}{1 \text{ year}}$$

$$x = 8.4 \text{ minutes}$$

01 mark

Hence, new magnetic variation is

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

$$= 9^\circ 36.6' \text{ or } 9^\circ 37'$$

02 marks

∴ The new magnetic variation is 9 degrees 37' minutes ( $9^\circ 37'$ )

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1 ©

Full square = 42

Half square =  $\frac{6}{2} = 3$  } of mark

Total squares = Full square + Half squares

42 + 3

∴ Total squares = 45 --- 1 mark

Scale given 1:100000

Change RF scale into statement scale

1 km = 100000 cm

? = 100000 cm

x = 1 km

∴ 1 cm = 1 km --- 1 mark

Area of one square



1 km

Area = Side x Side

= 1 km x 1 km

Area = 1 km<sup>2</sup> --- 1 mark

Area of total squares

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

45 squares = ? x

1 square x = 1 km<sup>2</sup> x 45 squares

1 square . . . . . 1 square

x = 45 km<sup>2</sup>

∴ The area is 45 km<sup>2</sup> . --- 1 mark

④ Factors affecting the composition of mapped area

i. Nature of the land surface

ii. The scale of the map used

iii. Purpose of the map

iv. Date of compilation @ 1 mark = 4 marks

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2 Cotton  $\frac{500}{1900} \times 100\% = 26.3\%$

Tea  $\frac{400}{1900} \times 100\% = 21.1\%$  01 mark

1991 :- Total 1700

Coffee  $\frac{900}{1700} \times 100\% = 52.9\%$

Cotton  $\frac{200}{1700} \times 100\% = 11.8\%$

Tea  $\frac{600}{1700} \times 100\% = 35.3\%$  01 mark

1992 :- Total 1000

Coffee  $\frac{500}{1000} \times 100\% = 50\%$

Cotton  $\frac{200}{1000} \times 100\% = 20\%$

Tea  $\frac{300}{1000} \times 100\% = 30\%$  01 mark

Determine the scale.

i. Horizontal scale

Let the horizontal length of the rectangle be 10cm

HS = 4600

10cm = 460

$\therefore$  1cm represent 460 units 01 mark

ii. Vertical scale

Let the height be 5cm where the total percentage of each year = 100%

$\frac{100\%}{5} = 20\%$

$\therefore$  1cm represent 20% 01 mark

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2

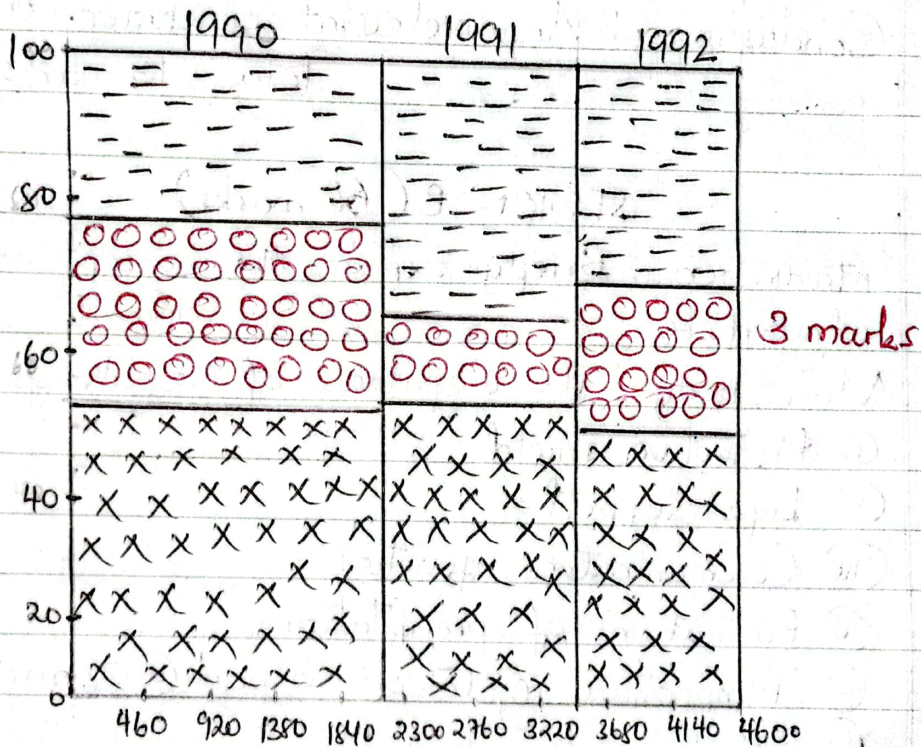
Year/Crop	Coffee	Cotton	Tea	
1990	1000 = 52.6%	500 = 26.3%	400 = 21.1%	01
1991	900 = 52.9%	200 = 11.8%	600 = 33.3%	mark
1992	500 = 50%	200 = 20%	300 = 30%	

A COMPOUND DIVIDED RECTANGLE SHOWING CASH CROPS  
PRODUCTION FOR COUNTRY X  $\frac{1}{2}$  mark

Scale

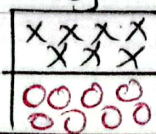
01 mark

Vertical scale: 1cm represent 20%  
Horizontal scale: 1cm represent 460 tons



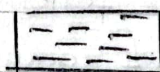
3 marks

Key



- Coffee

- Cotton



Tea }  $\frac{1}{2}$  mark

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### 3 Extraterritorial photograph

Are those images of the earth or other planets collected by satellites 02 marks

⇒ Importance of extraterritorial photograph

- (i) Give information on amount of heats and energy released from the earth.
- (ii) Monitor amount of snow during winter
- (iii) Examine crop condition, areas of deforestation and regions of drought.
- (iv) Detects volcanic eruptions and motion of clouds.
- (v) Allow weather forecasters to warn growers if upcoming low temperature.
- (vi) People who fish for a living can find out valuable information about the temperature.

(a) 2 marks = 12 marks

Conclusion :- Any relevant conclusion 01 mark

Total - 15 marks

### SECTION B (60 marks)

4 Introduction : Briefly explain the concept of atmosphere 01 mark

Main body : The usefulness of the atmosphere

- (i) Protective shield
- (ii) Life support
- (iii) Communication function
- (iv) Formation of precipitation
- (v) Temperature regulation 6 parts @ 03 = 18 marks
- (vi) Scientific research field
- (vii) Transport function
- (viii) Source of gases

Conclusion : Any relevant conclusion 01 mark

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5 **Introduction**:- Briefly explain the concept of overland flow (surface run-off).

Overland flow (surface run off) is the hydrological process in which some water flows over the surface.  
OR

Is the hydrological process which involves movement of water over the surface. **01 mark.**

⇒ Factors influence overland flow (surface-run off)

i. Nature of the soil.

ii. Nature of the climate

iii. Steepness of an area

iv. Vegetation cover

**6 points @ 03 marks = 18 marks**

v. Level of saturation

vi. Presence of water bodies

vii. Human activities

**Conclusion**:- Any relevant conclusion **01 mark**

6 **Introduction**:- Briefly explain the concept of soil colour

**Main body**:- Factors influencing soil colour

i. The type of parent rock from which the soil has developed. **Any 3 points @ 3 marks = 09 marks**

ii. Chemical composition of the soil.

iii. The organic matter content within the soil.

iv. The drainage of the area where the soil found

⇒ Importance of soil colour.

i. It is used to identify the components making up the soil.

ii. It is used to guess the productive capacity of the soil.



iii. It determines the ability of the soil to receive heat energy and reflect back into the atmosphere. **Any 3 points @ 3 marks = 09 marks**

iv. It determines whether soil is well drained and well aerated.

v. It is important in soil classification and description.

**Conclusion :- Any relevant conclusion 01 mark**

7 **Introduction :-** Briefly explain the concept of absolute humidity and relative humidity.

- Absolute humidity is the actual amount of water vapour or moisture in a given volume of air at particular temperature. **01 mark**

- Relative humidity :- Is the ratio of the actual amount of water vapour in a given volume of air.

→ Factors that influence the distribution of atmospheric humidity.

i. Amount of solar radiant energy reaches on the earth's surface.

ii. Water bodies

iii. Prevailing winds

iv. Vegetation

v. Relief

vi. Altitude

vii. Ocean current

viii. Precipitation factor

**Conclusion :- Any relevant conclusion 01 mark**

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