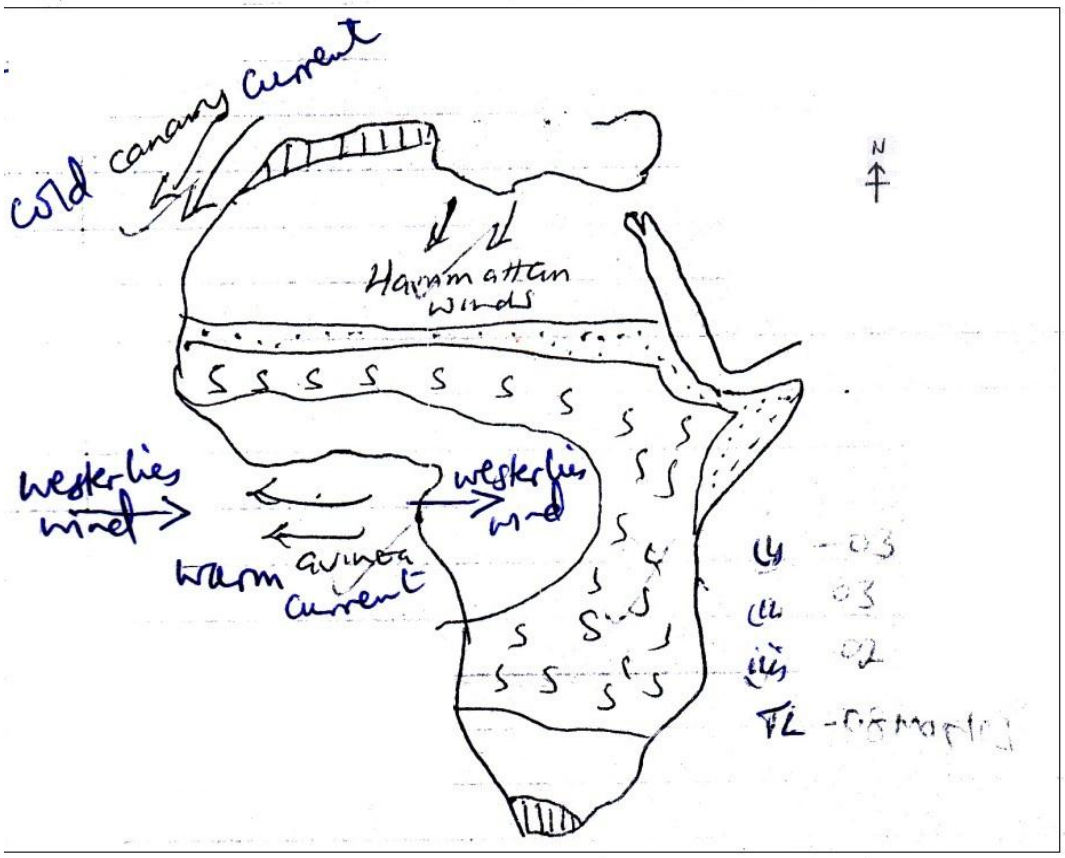
MWALIMU EXAMINATIONS BUREAU

UCE RESOURCE MOCK EXAMINATIONS – 2019

GEOGRAPHY

Paper 2 Marking Guide

1. (a) Sketch map of Africa showing climate zones, ocean currents and prevailing winds



b). Describe the characteristics of either Mediterranean or savannah climate

Mediterranean

- ✓ Cool and wet winters
- ✓ Warm and dry summers
- ✓ Temperature range 21°C in which summer and in 10°C in winter
- ✓ Low humidity
- ✓ Cloudless skies
- ✓ On shore Westeries (winter)
- ✓ Off shore winds (summer)
- ✓ No rain
- ✓ Rainfall 500 - 760 mm

Savanah

- ✓ Two district season wet and dry
- ✓ Summers-hot-32^{o}C
- ✓ Winters – cool-21^{o}C
- ✓ Annual temperature range-11^{o}C
- ✓ Convectional rainfall – summer
- ✓ High humidity
- ✓ Rainfall -600-1000 mm
- ✓ Hot and wet summers
- ✓ Cool and dry winters

c). Explain the conditions that have favoured the existence of Savannah climate

- Latitudinal location near the equator implying moderate rainfall
- Influence of savannah woodlands through evapotranspiration
- Apparent movement of the sun which results into sessional distribution of rainfall
- Influence of prevailing winds that bring moderate rainfall in areas per year
- Human activities like deforestation which turn areas from equatorial to savannah conditions.
- Influence of prevailing winds
- Nearness to water bodies which provide seasonal rainfall through evapotranspiration.

Max 6 mks

d). Outline the economic activities carried out in the T. climate

- Tourism – game and national parks – grassland.
- Animal rearing due to presence of pastures.
- Lumbering in the woodlands
- Available farming i.e planting during the rainy season.
- Charcoal burning due to presence of woodlands
- Collection of wild fruits and local herbs.
- Api-culture due to presence of woodlands.
- Trade and commerce in agricultural produce.
- Establishment of agro-based industries

Any 5x1 = 5 marks

Sugar cane growing in Natal Province S.A

2. a) Name

i. Ports

A. Durban **1mk**

B. Shepstone **1mk**

ii. Rivers

1. Umfolosi **1mk**
2. Tugera **1mk**

iii. Water bodies

3. L. St. Lucia **1mk**
4. Indian Ocean **1mk**

iv. Ocean Current

Y- Mozambique warm ocean current **1mk**

v. Country

C- Swaziland **1mk**

b). Describe the physical conditions that have favoured sugarcane growing in Natal

- ✓ Gently sloping landscape
- ✓ Hot temperatures 21^0C and above
- ✓ Heavy rainfall 1000 mm
- ✓ Low-lying areas
- ✓ Extensive land
- ✓ Rivers- water- irrigation
- ✓ Well drained soil

6x1 = 6 marks

c). Explain the problems facing sugar cane growers in Natal Province, South Africa

- ✓ Competition from other producers
- ✓ Price fluctuations due to over production and competition
- ✓ Labour shortages
- ✓ Shortage of capital
- ✓ Vagaries of weather
- ✓ Profit repatriation
- ✓ Soil exhaustion and erosion
- ✓ Pest and diseases
- ✓ Weeds

6x1 = 6 marks

d). Outline the steps taken to solve the problems

- ✓ Regulate sugar production
- ✓ Construct storage facilities
- ✓ Improve quality of sugar
- ✓ Raise workers wage
- ✓ Attract investors
- ✓ Use pesticides
- ✓ Spraying the woods
- ✓ Applying fertilizers
- ✓ Follow and control foreigner's activities
- ✓ Loan from the government and SASA (SA Sugar Association)

Any 5x1 = 5 marks

Total 25marks

3(a). Calculate the percentage of called produced in the countries showing in the table above.

Botswana $= \frac{2,767,00}{15,540,00} \times 100$ = 17.8%

= 18%

Burkina Faso $= \frac{4,178,000}{15,540,00} \times 100$ = 26.9%

=27%

Mali $= \frac{5,432,000}{15,540,00} \times 100$ = 34.95%

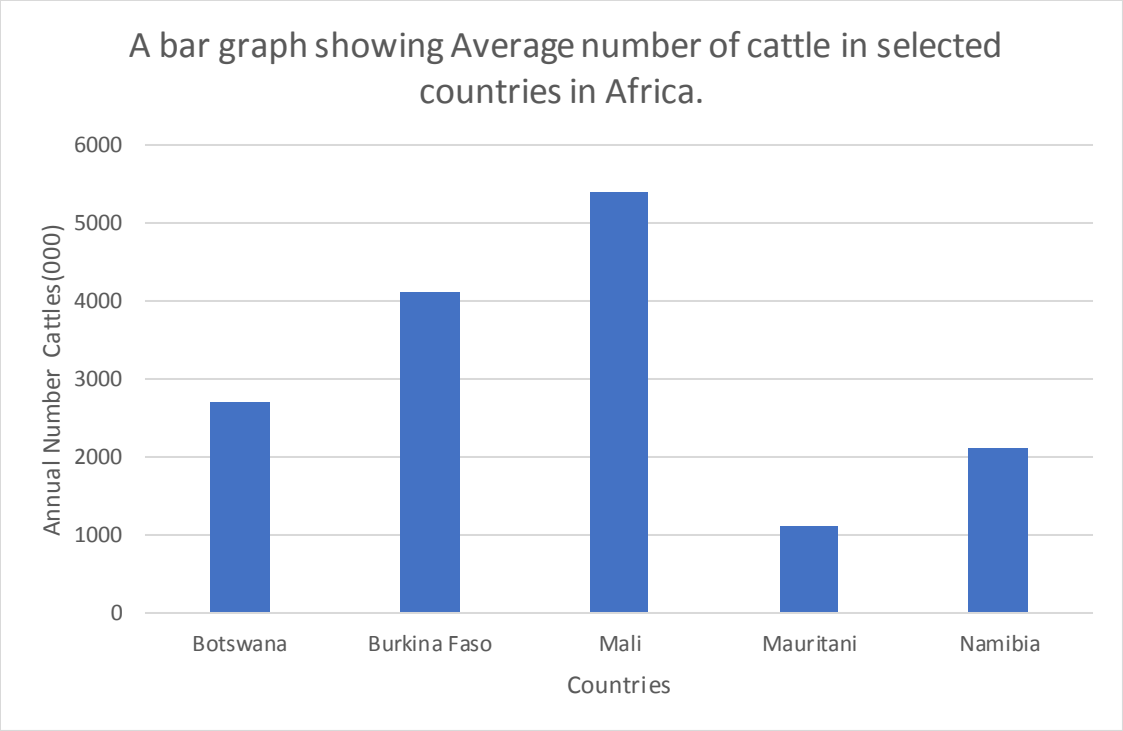
= 35%

Mauritania $= \frac{1,070,000}{15,540,00} \times 100$ = 6.9%

= 7%

Namibia $= \frac{2,093,000}{15,540,00} \times 100$ =13.5%

=13%



(b)(i). Any two countries where transhumance is practiced

- Nigeria

- Chad
- Mali
- Mauritania
- Senegal
- Burkina Faso

(2 mks)

Ranching countries

- Botswana, Namibia, Angola, Zambia, Zimbabwe. (01 mk)

(c). Factors for Ranching in Botswana / Namibia / Angola

- Vast land for the establishment of ranches
- Gently sloping plateau that eases the movement of animals on the ranches.
- Presence of extremely dry and hot conditions that discourage arable farming leaving ranching as the best alternative use of the land.
- Large market for beef in Africa and beyond
- Skilled labor from the population to work on the ranches.
- Adequate capital from the government, banks in form of loans and foreign investors to invest in ranching.
- Efficient transport by railway and road that facilitates the distribution of livestock products.
- Favorable government policy that supports ranching by providing capital and unlimited infrastructure.
- Fresh water for the animals to drink for the rivers and streams in the region.
- Advanced technology that eases work on the farms in term of feeding, spraying, slaughtering animals. Etc.

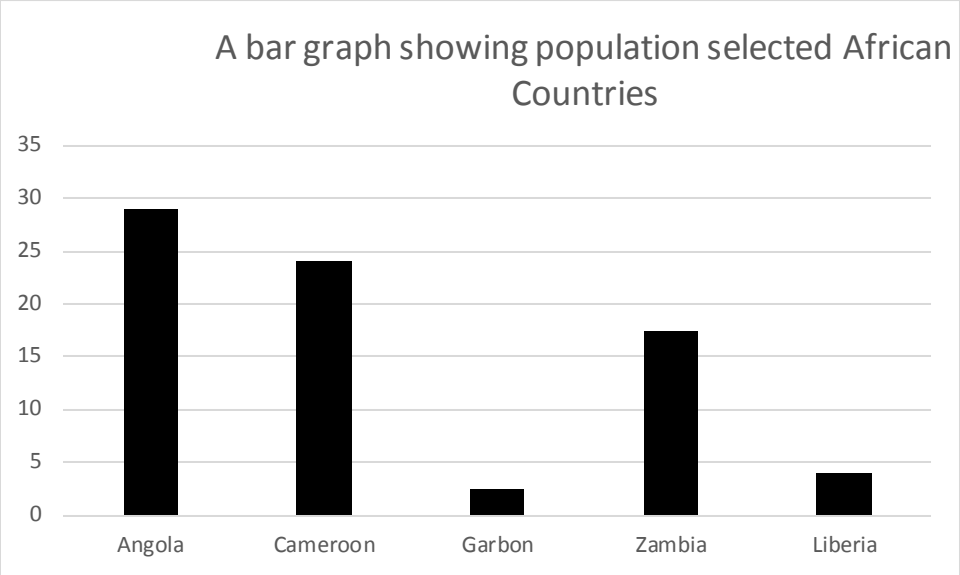
(5 marks)

(d). Measures being taken to improve the livestock sector in Africa.

- Regular inoculation against diseases / spraying
- Establishment of meat processing industries.
- Construction of bore holes / water hole to increase access to water
- Planting of feeder crops / artificial grass to supplement natural pasture
- Expansion of transport routes to the livestock areas.
- Development of better yielding breeds at the research centers.
- Advertisement of animal products to widen the market
- Strengthening cooperatives
- Application for loans from financial institutions

(max 5)

4 (a)



Countries

(b). Population density for the selected the countries

Angola = $\frac{29,700,000}{1,246,700}$ = 23.8 PPSK 1mk

Cameroon = $\frac{24,050,000}{475,650}$ = 50.5 PPSK 1mk

Gabon = $\frac{2,025,000}{267,667}$ = 7.5 PPSK 1mk

Zambia = $\frac{17,090,000}{267,667}$ = 22.7PPSK 1mk

Liberia = $\frac{4,700,000}{267,667}$ = 42.2 PPSK 1mk

(i). Country with the lowest population density

Is Gabon at 7.5 PPSK 1mk

(ii). Factors for the low population density in Gabon

- Presence of this extensive forests that are hard to clear for settlement.

- Presence of too much rainfall that cause floods hence discouraging settlement.
- Presence of hot temperatures and high humidity leading to uncomfortable viewing caused by heavy rains, hence, discouraging agriculture and consequences settlement.
- Remoteness / in accessibility due to devise forests hence discouraging settlement.
- Frequent outbreak of pests and diseases that discourage farming and settlement leading to low population density.

(d). Problems associated with countries with a low population density.

- Limited labour supply leading to low production.
- Inadequate market for goods and services leading to low levels of development.
- Low tax base hence affecting economic development in the region.
- Such countries are prone to insecurity since they have limited man power to recruit in armed forces.
- In adequate social services since governments find it un economical to put such facilities / services in place.
- Under utilization of natural resources due to limited labour and market.

(6 mks)

5. Pie chart to show different land uses in British Columbia.

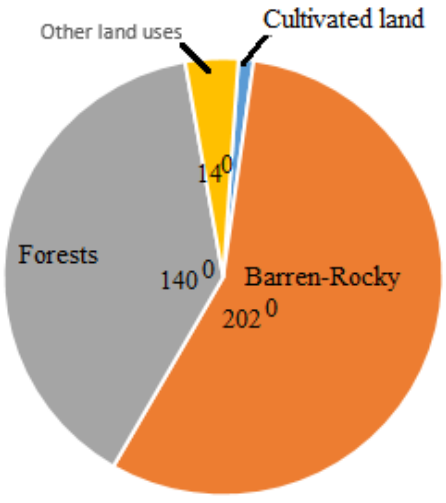
Cultural land $\frac{1.0}{100}$ x 360° = 3.6° ≈ 4°

Forests = $\frac{39.0}{100}$ x 360° = 140.4° ≈ 140^0

Barren –Rocky $\frac{56.0}{100}$ x 360° = 201.6° ≈ 202°

Other land uses $\frac{4.0}{100}$ x 360° = 14.4°≈ 14^0

A pie chart showing land use in British Columbia.



(b). Way in which Barren and rocky mountain are being utilized by man in B.C

- Growth of forest to support the forestry sector.
- Mining
- Tourism
- Education and research
- Recreation activities e.g. mountain climbing.

(Max 4)

(c). (i). Important activity related to the forests of B.C

- Lumbering (01mk)

(ii). Factors favoring Lumbering in BC

- Presence of extensive forests that are sources of soft wood.
- Valuable tree species e.g. Balsam fir, western hemlock, pines, spruces etc.
- Rugged relief restricts other economic activity leaving lumbering as the most viable use of the Land.
- Numerous rivers that are used to transport logs to the processing centres.
- Stable power to operate the machines in the sawmills.
- Advanced technology e.g. use of electric chain saw and mobile steel spars that ease the work.
- Wide market for the forestry products in USA, Europe etc.
- Skilled labour to work in lumbering as lumberjacks, chokemen, buckers.
- Adequate capital from government to invest in lumbering.
- Presence of heavy rainfall that encourages the growth of forests. (Max 6)

d (i).Problems faced by lumbering sector.

- Summer fires that destroy the forests
- Winter freezing affects logging and transport.
- Log jam along the rivers leading to delays.
- Shortage of labour due to competition from other sectors.
- Competition for market with other producing countries.
- Pests and diseases attack the trees hence reducing their quality.
- Wild animals
- Over exploitation of the trees. (Max 4)

(ii). Solutions to the problems

- Aerial spraying
- Afforestation
- Time tabling of the forest activities
- Log high, log low
- Mechanization of all lumbering activities.
- Use of water bombers / establishment of fire control towers.

Max 3

(25marks)

Qn.6..(a). Any three

(i). States under the TVA

Alabama, Mississippi, Tennessee
Kentucky, Virginia, Georgia, south
Carolina North Carolina, Kentucky

(Max 3)

(ii). Rivers draining the area under TVA

- Mississippi
- Ohio
- Tennessee
- Cumberland

(3mks)

(b). Condition which led to the establishment of the TVA

- Regular flooding of R. Tennessee and its tributaries.
- Extensive soil erosion on the hilly slopes.
- Silting of the rivers hence affecting navigation.
- Too much rainfall leading to increased flooding.
- Waterborne pests and diseases e.g. malaria, bilharzia
- Food shortage / famine / malnutrition.
- Waterfall and rapids that affected navigation.
- Inadequate H.E.P
- High levels of unemployment blue to fever economic activities.

(c). Activities of the T.V.A

- Terracing of the hilly slopes
- Contour ploughing
- Afforestation and re-afforestation
- Construction of dams to generate H.E.P and control floods.
- Establishment of demonstration farms to teach farmers better methods of farming.
- Establishment of brushwood barriers.
- Establishment of industries to offer employment opportunities.
- Spraying
- Construction of canals to by-pass the water falls and rapids. (Max 6)

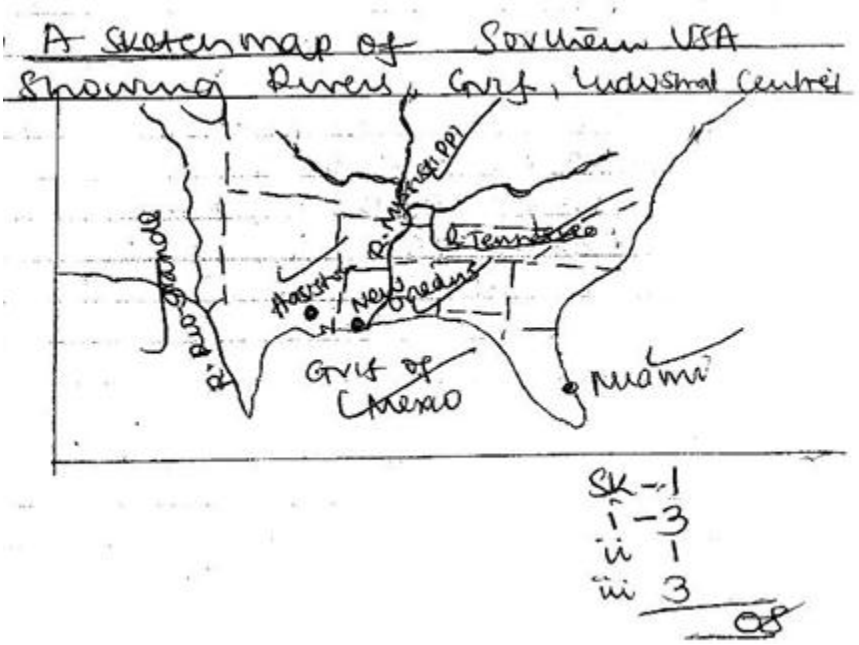
(d). Benefits of the T.V. A to USA

- Development of tourism leading to generation of foreign exchange.
- Employment leading to better standards of living.
- Generation of HEP for domestic and industrial use.
- Creation of man-made lakes that are sources of water for domestic irrigation and industrial use.

- Development of fishing in the man-made lakes
- Development of towns / ports e.g. Nashville, Huntsville .etc.
- Source of income leading to better standards of living.
- Development of infrastructure e.g. roads, railways, canals etc.
- Control of flooding hence reduced waterborne diseases.

Max 7
(25mks)

Qn.7(a). A sketch map of southern USA showing Rivers, Gulf, Industrial centres.



(b).(i). Industries found in

Houston:	**New Oceans**	**Miami**
Oil refining	Ship building	Aero space
Chemical	Oil refining	Chemical
Textile	Petro-chemical	Textile
Food Processing	Textile	Cement
Ship building & Repair		making

(2mks)

(ii). Factors for the development of industries in the south of USA
- Large quantities of water for industrial use.
- Abundant supply of raw materials e.g. cotton, oil.
- Extensive land for establishment of industries.
- Adequate capital for investment

- Wide market for the industrial products.
- Efficient transport based on water, road and railway.
- Favorable government policy
- Advanced technology
- Stable power
- Skilled labour to work in the sector.

(Max 6)

(c). Effects of industrial sector on the environment in southern USA

- Foreign exchange earnings
- Revenue for the government
- Income leading to better S.O.L
- Provision of employment
- Diversification of the economy
- Promotion of international relations
- Development of infrastructure
- Development of towns
- Provision of consumer goods.

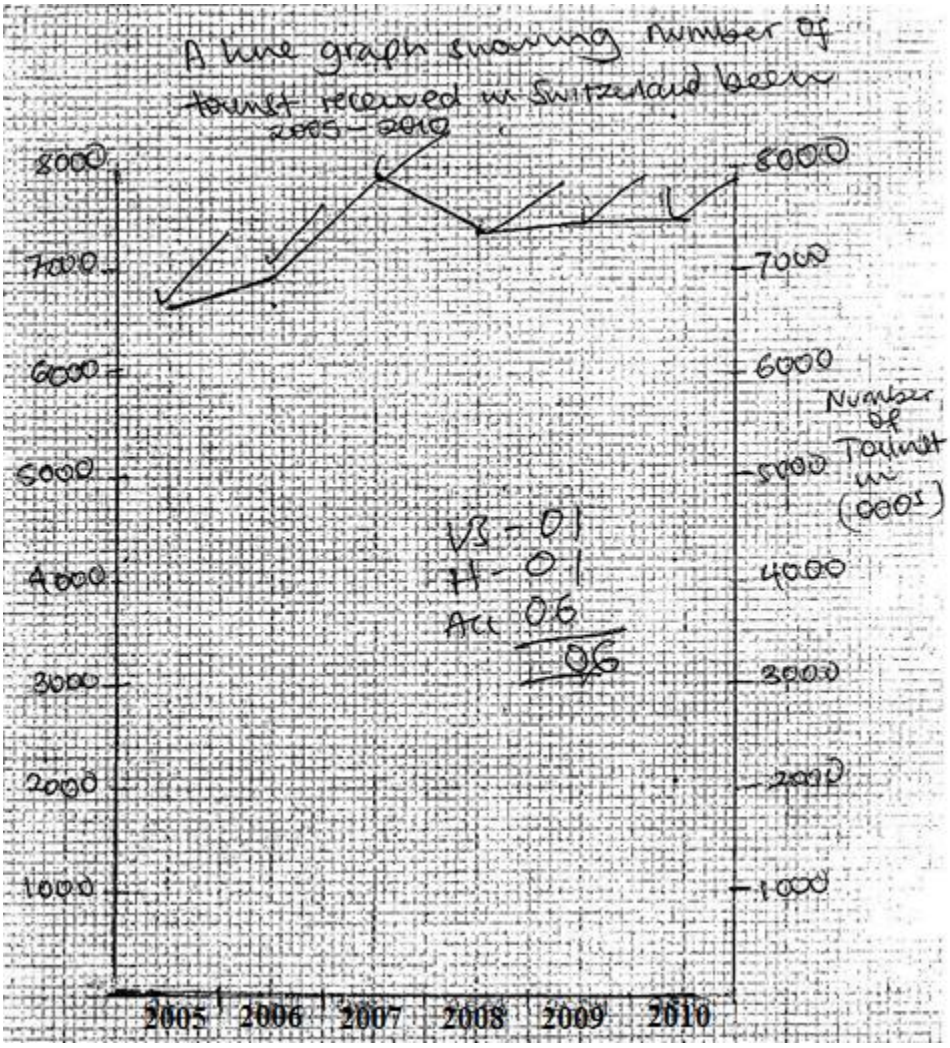
Negatives

- Environmental pollution
- Destruction of vegetation cover
- Loss of bio-diversity
- Increased global warming
- Formation of acidic rain
- Congestion in the industrial centres
- Urban related problems e.g. high crime rate.
- Exhaustion of minerals and other raw materials. (Max 6)

(d). Measures being taken to improve industrial development in the south of USA.

- Automation of industrial activities
- Importation of labour
- Importation of raw materials
- Recycling of industrial wastes
- Treatment of wastes
- Market research development through training.
- Economic bail outs by government Max 3

Qn.8 (a). Graph



(b).(i). Trend in the number of tourists received in Switzerland.

- There was steady increase in the number of tourist between 2005-2007
  Then a slight drop between 2007 – 2008
  Steady increase form 2008 – 2010

(Max 2)

(ii). Factors / Conditions that have favored the development of the tourism industry.

- Variety of tourist attractions e.g. mountain scenery, glacial features, rivers, lakes etc.
- Variety flora and fauna
- Hospitality of the Swiss people
- Neutrality policy
- Political stability
- Efficient transport makes tourist to work in the tourism sector.
- Lingual plurality breaks down the communication barriers.
- Numerous tour packages

- Intensive advertisement
- Central location helps Switzerland to tap visitors from different countries.

(6mks)

(c). Contribution of tourism to the development of Switzerland.

- Provision of employment to the people of Switzerland
- Source of income leading to better standards of living.
- Source of government revenue from taxation of the tour companies.
- Generation of foreign exchange since tourism is an invisible export
- Development of towns e.g. Zurich, Geneva, Davos etc.
- Diversification of the economy
- Development of infrastructure e.g. roads, railways.
- Promotion of international relations between Switzerland and countries from where tourists come.

(Max 6)

(c). Measures being taken to make the tourist sector more competitive.

- Intensive advertisement
- Electrification of the transport sector
- Introduction of competitive packages
- Importation of labour from neighboring countries.
- Diversification of accommodation facilities to cater for different categories of people.

  Diversification of tourist activities

(Max 3)

Total 25 marks

Qn. 9(a)

(i). Rivers A R. Scheldt

B R. Meuse (02mks)

(ii). Canal 1 - Guent – Zelzate (01mk)

(iii). Towns 2 - Antwerp

3 – Ghent (02mk)

(iv). Land use 4 – Forestry (01mk)

(v). Country 5 – Luxembourg (01mk

(vi). Waterbody C – North Sea (01mk)

(b). Factors that favored the development of forestry in Belgium

- Presence of large tracts of forested land in the Ardennes region.
- Trees appear in pure stands therefore easy to exploit.
- Presence of moderately heavy rainfall encourage the growth of trees.
- Skilled labour to work in the sector
- Advanced technology that eases the exploitation of forests.
- Ready market for forestry products in Belgium and EU
- Large quantities of water from rivers for use in processing the timber.
- Stable powers to operate the machines in the sawmills.
- Favorable government policy that support the sector by providing capital.

Max 6

(c). Benefits of forestry to Belgium

- Source of raw materials for the sawmills.
- Promotes tourism leading to generation of foreign exchange.
- Provision of income leading to better standards of living.
- Generation of revenue from taxing the forestry sector.
- Promotion of international relations
- Diversification of the economy
- Development of towns / urban centres
- Development of infrastructure e.g. roads, railways.

(Max 6)

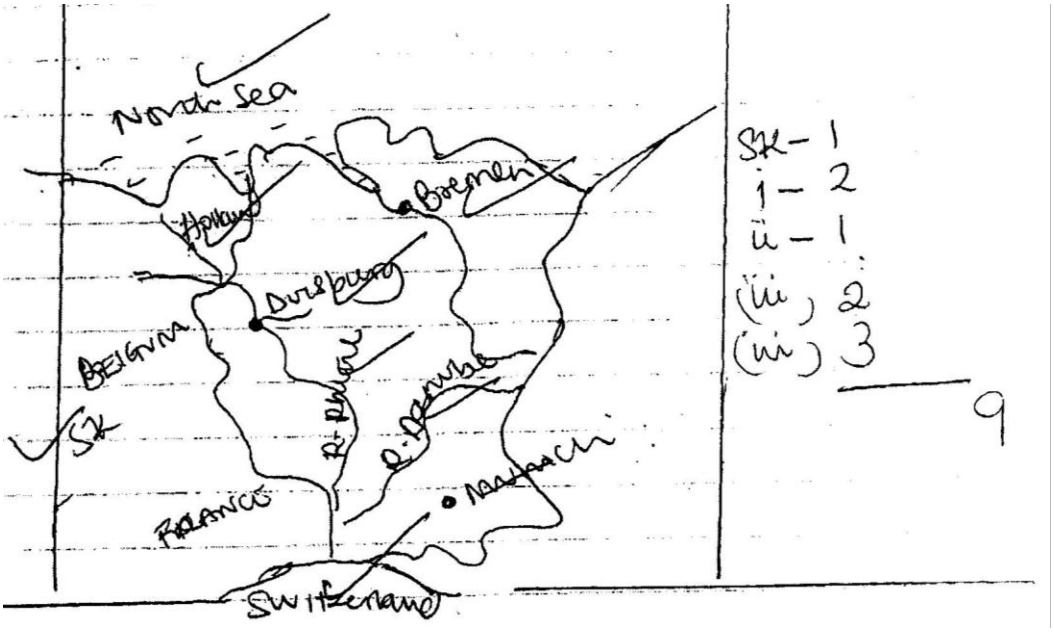
(d). Problems affecting the development of the forestry sectors.

- Competition from other producers Finland, Sweden.
- Shortage of labour due to completion from other sectors.
- Summer fires destroy the forest land.
- Accidents during exploitation
- High cost of production

Max 5

(25mks)

Qn. 10.(a). A sketch map of Germany showing rivers, North sea countries and towns.



(b)(i). Two industries found in

Munich	**Duisburg**	**Bremen**
Iron and steel	Chemical	Iron and steel
Engineering	Engineering	Chemical
Motor vehicle manufacture	Electronics	Engineering
Chemical	Food processing	Motor vehicle
Textile		
Food processing		

Any 2 (2mks)

(ii). Factors that led to industrial developments in Germany

- Vast land for establishment of industries
- Large supply of raw materials which are processed into finished products.
- Numerous Rivers provide water for industrial use.
- Skilled labour from the population to use in the industries.
- Positive government policy which attracts investors.
- Advanced technology leading to high output
- Efficient transport network for quick delivery of raw materials and finished products.

- Political stability that is attractive to investors.
- Stable power to run the industrial machinery. E.g. HEP, Thermal etc.

(Max 6)

(d). Benefits of industrial development to Germany.

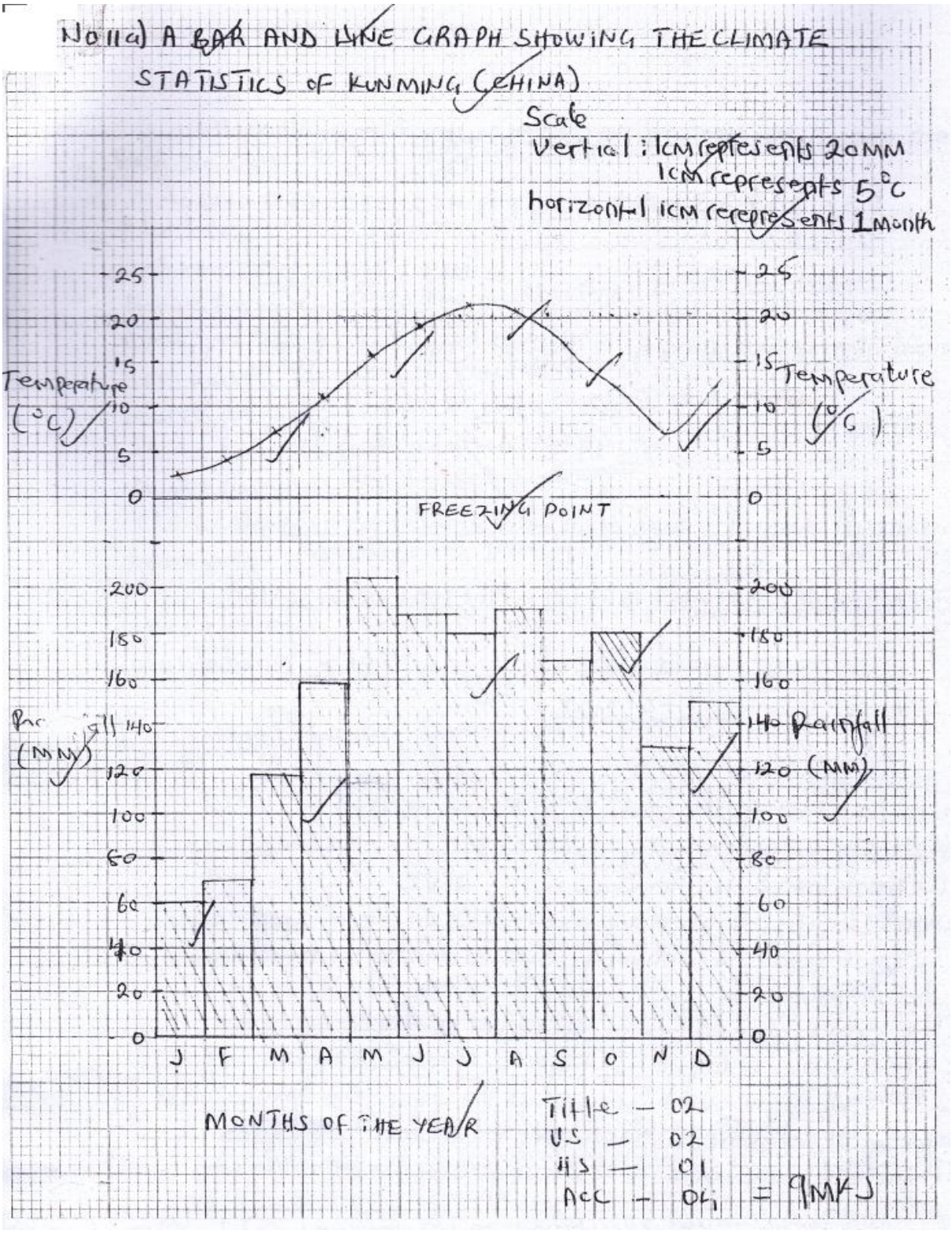
- Foreign exchange
- Revenue
- Employment opportunities
- Development of infrastructure
- International relations through trade.
- Development of towns e.g. Bremen, Munich.
- Diversification of the economy
- Provision of consumer goods
- Income leading to better S.O.L

(Max 5)

(c). Problems facing the industrial sector in Germany

- Inadequate raw materials
- Shortage of labour
- Competition of land
- High taxation by government
- Pollution etc. (Max 3)

11. a)



b. (i) Mean annual Temperature $= \frac{\text{Sum of temperature for all months}}{12}$

$$\frac{2.3 + 3.6 + 7.3 + 11.3 + 15.5 + 19.4 + 21.3 + 20.8 + 17.5 + 12.3 + 7.1 + 11.5}{12}$$

$$\approx 12.5^0C$$

(**ii**) Annual temperature = Hottest temperature value − coldest temperaure value

$$21.3 - 2.3 = 19^0C$$

(**iii**) $\frac{\text{Sum of all rainfall total for 12 months}}{1}$

$$= \frac{57 + 67 + 118 + 159 + 203 + 186 + 181 + 191 + 150 + 181 + 130 + 150}{1}$$

$$= \frac{1781}{1} = 1781\text{mm}$$

c). Characteristics of the climate of Kinming

- Hottest month is July with 21.3^0C
- Coolest month is January with 2.3^0C
- Wettest month is May 203 mm of rainfall
- Driest month is January with 57mm of rainfall
- The annual temperature range is high of 19^0C
- The mean annual temperature range is 12.5^0C
- Mean annual rainfall is high i.e 178 mm
- Rainfall is received throughout the year, through declines during the months of December to March.
- Temperatures are cold during November to March

Any 5x1 = 5 marks

(ii) How the climate has influenced agricultural activities

- Planting of crops during March since it starts the wet season.
- Harvesting of crops during the start of the dry season in November.
- Irrigation farming is practiced between November to March to supplement the low rainfall received.
- Some farmers rest between months of November to March in preparation for the wet season.
- Clearing of new plots and buying seeds during the season of November to March.
- Heavy rainfall received throughout the year encourages plantation farming.

d). Problems facing farmers in Kunming

- Flooding during the wet season leading to destruction of crop fields.
- Aridity in some months (November – March) which discourages cultivation.
- Torrential downpours which destroy crop fields.

- Price fluctuations which affect incomes of farmers.
- Soil exhaustion leading to low crop yields.
- Inadequate labour to work on the farms leading to delays.
- Competition for market leading to losses.
- Outbreak of pests and diseases reducing quality and quantity of yields.
- Limited land for extensive farming reducing crop yields.

Any 3x1 = 3 marks

12. a) (i) River marked A & B

A- River Mekong B- R. Si-Kiang

(ii) Water body marked C.

C-Gulf of Tong King

(iii) Towns marked 1& 2

1- Kunming 2- Jinhong

(iv) Countries marked 3 &4

3-Burma 4- Vietnam

1 mark @; total 7 marks

b) (i) Minerals, coal, iron ore, zinc, tin **any 2x1 = 2 marks**

(ii) Sources of energy: coal, oil, bio gas, H.E.P, Solar **any 2x1 = 2 marks**

c). Factors which have limited the development of the mining sector in the Yunnan region of China.

- Existence of minerals in small reserves which are uneconomical to mine.
- Inaccessibility of some areas due to the rugged terrain in the Yunnan province.
- Scattered minerals reserves limit their exploitation.
- Accidents in the deep copper mines leading to death of people.
- Price fluctuations on the world market arising from the stiff competition which affects projected profits.
- High costs of mining which affects the profits from mines.
- Exhaustion of mineral deposits affecting projected production.
- Completion with other mineral producers in the world reducing market.
- Labour shortage leading to delays in the mining process.
- Competition from mineral substitutes such as plastics, rubber and wood reducing market for minerals.

Any 8x1 = 8 marks

d). Measures being taken by China to develop the Yunnan region

- Construction of transport and communication lines to improve accessibility.

- Terracing to improve cultivation on the steep slopes.
- Establishment of mining companies such as Jiangxi copper cooperation, copper metallurgical group etc.
- Establishment of industries to provide employment to the citizens of Yunnan.
- Terracing to improve and contour ploughing to provide employment to the citizens of Yunnan.
- Application of fertilizer to improve soil fertility.
- Construction of H.E.P stations to avail energy for domestic and industrial purposes.
- Extension of credit facilities to the Chinese to boast investment in the Yunnan region.
- Agricultural modernization to improve food production in the region.

Any 6x1 = 6 marks

13. a). SKETCH MAP OF THE SIKIANG RIVER BASIN SHOWING RIVERS, HONG-KONG ISLANDS, GULF OF TONG KING AND TOWNS

Refer to last page

b) (i). Types of farming carried out in the Kiang river basin

- ✓ Arable farming
- ✓ Mixed farming
- ✓ Livestock farming

Any 2x1 = 2 marks

(ii). Conditions that favoured development of agriculture in Sikiang river basin

- Fertile alluvial soils which support growth of a variety of crops.
- Warm sunny summer conditions ideal for ripening of crops.
- The 220 frost free days which increase the period of the growing season.
- Heavy rainfall received from May to October which boasts growth of crops.
- Existence of rivers e.g. Sikiang and Tung kiang which provide water for irrigation.
- The gently sloping areas which encourage mechanization well developed transport and communication lines linking farms to markets.
- Availability of adequate skilled labour to work on the farms.
- Land reclamation has expanded the area for agricultural activities.
- Availability of a wide market provided by the large population encourages investing into agriculture.
- The development of agro based industries has encouraged farming activities.
- Abundant cheap skilled labour.
- Research has increased quality and quantity.
- Appropriate technology through irrigation and use of tractors.

Any 6x1 = 6 marks

c). Effects of agricultural activities on the environment of Si-kiang. NB: Both positive and negative

POSITIVE

- Source of forex used to develop other sectors.
- Source of employment which earns income to farmers.
- Source of government revenue through takes used to develop infrastructure.
- Boasted industrial growth in the region.
- Economic diversification reducing over dependence on agric.
- Development of infrastructure particularly roads which improves people's standard of livings.

NEGATIVE

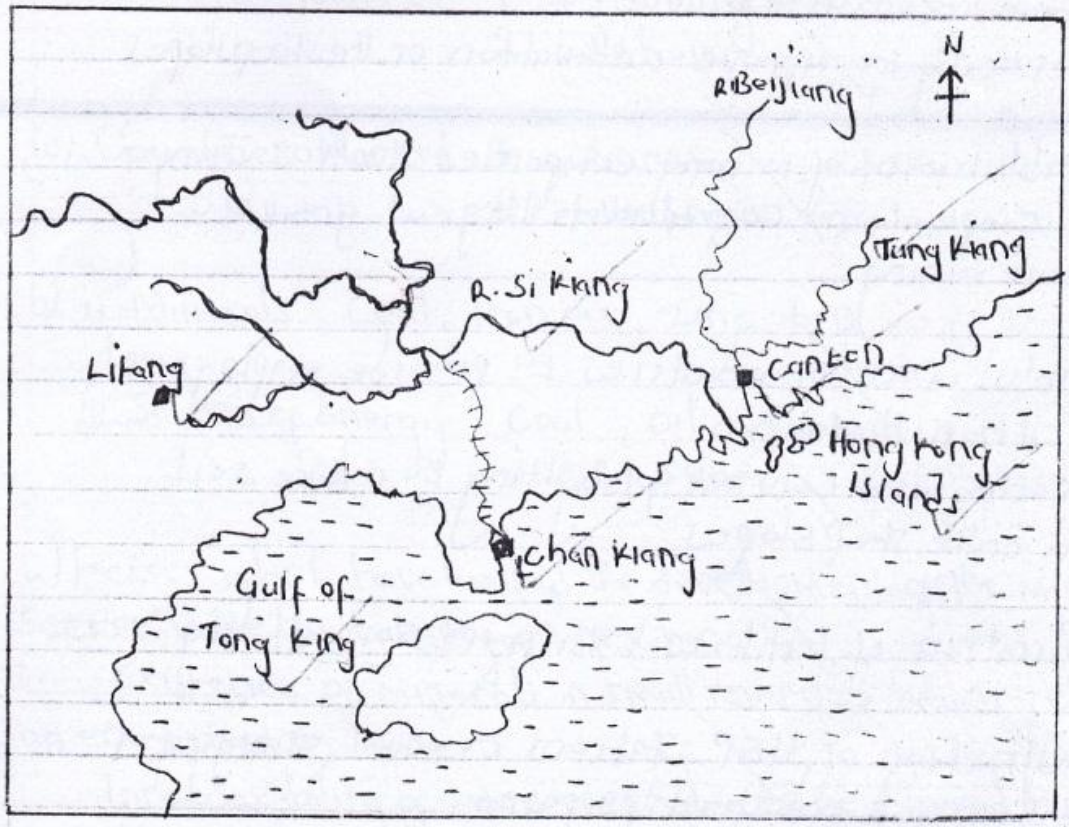
- Pollution of the environment through pesticides and herbicides.
- Destruction of vegetation cover to create land for farming.
- Soil exhaustion resulting from over use of the land by farmers.
- Agriculture has accelerated soil erosion leading to environmental degradation.
- Compaction of soils due to use of heavy agricultural machinery leading to creation of hardpans.

d). Measures being taken to improve the agricultural sector in the Si-kiang river basin

- Use of organic and artificial fertilizers to improve soil fertility.
- Dredging with pesticides to control pests and diseases.
- Construction of dykes to control floods.
- Land reclamation from swamps to increase land for farming.
- Construct of reservoirs to store water for irrigation during the dry season.
- Introduction of new crops to improve agricultural diversification.
- Extension of loans to boast agricultural investments.
- Establishment of agro-based industries to add value to agricultural products.

Any 5x1 = 5 marks

13 a) THE SKETCH MAP OF THE SI KIANG RIVER BASIN SHOWING RIVERS, HONG-KONG ISLANDS, GULF OF TONG KING AND TOWNS



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