

## REST OF AFRICA

1 (a)

$$\text{Percentage change} = \frac{\text{New} - \text{Old}}{\text{Old}} \times 100\%$$

Cape Town

$$\frac{4,800,000 - 2,300,000}{2,300,000} \times 100$$

$$= 108.6\% \checkmark$$

$$\text{Durban} = \frac{3,100,000 - 2,000,000}{2,000,000} \times 100$$

$$= 55\% \checkmark$$

Johannesburg

$$\frac{6,000,000 - 2,300,000}{2,300,000} \times 100$$

$$= 172\% \checkmark$$

Soweto

$$\frac{1,600,000 - 500,000}{500,000} \times 100$$

$$= 220\% \checkmark$$

Benoni

$$\frac{6000,00 - 2000,00}{2000,00} \times 100$$

$$= 200\% \checkmark$$

$$\frac{2,900,000 - 1,500,000}{1,500,000} \times 100$$

$$= 93\% \checkmark$$

Tembisa

$$\frac{500,000 - 300,000}{300,000} \times 100$$

$$= 66\% \checkmark$$

7 mks

(b) (i) ~~Johannesburg~~ Johannesburg

Pretoria

Benoni

(ii) Graph

3 mks

5 mks

(c) Factors that have favoured the growth of Rand Conurbation:

- The presence of wide range of valuable minerals for example gold in Johannesburg that attracted many people for employment in mining industry.
- Plenty of power resources in form of HEP, Coal for industrial use, domestic heating and to support trade in Pretoria.
- Existence of many industries for example iron and steel in Pretoria that have attracted large population for labour and settlement.
- Abundance of water supply for domestic and industrial use from River Vaal for industrial

2

- and domestic use leading to development of urban centres like Banosí id
- well developed transport and communication network by road and railway lines for movement of trade items and people
- well developed social and commercial facilities such as health facilities; Education ds banking, insurance that attract large population concentrate in the Rand regions.
- positive Government policy of promoting local production, financing Infrastructure ds development through enabling policies.
- Adequate capital to invest in mining, trade, industry leading to development of urban facilities.
- Skilled and semi-skilled labour to work in the Service Sector like banking and entertainment leading to expansion of the Rand.
- Ready market id - rich & productive hinterland
- high level/advanced
- Extensive Land  $\rightarrow$  Expansion

(d)

### Effects of Urbanisation on the Physical Environment

- Deforestation and general vegetation disruption during the expansion of urban centres.
- Overexploitation of natural resources like minerals and water, ex.
- Distortion of the landscape by heaps of garbage in corners of urban centres.
- Pollution from car fumes, smoke from factories leading to environmental deterioration.
- Easy spread of diseases due to congestion

Ques 02  
Ex max 2

Hawks

25

(2)

2 (a)

- (i) A Mediterranean ✓  
 B Equatorial ✓  
 C - Desert and semi desert ✓  
 D - Savannah vegetation ✓

- (ii) 1 - Guinea ✓  
 2 - Banquela cool ocean currents 2

- (iii) - cameroon ✓

- Nigeria ✓ Any one.
- Congo ✓
- DRC ✓

- Gabon ✓
- Central African Republic
- Ghana
- Liberia
- Equatorial Guinea

- (b) characteristics of Equatorial/Tropical rainforests

- Trees are very tall having a height of about 10 - 60 m. ✓
- Nearly all the trees are broad leaved that allows rapid transpiration ✓
- Forests are ever green shading leaves at different intervals. ✓
- Trees have thick barks to allow water penetration ✓
- Forests are heterogeneous that is do not appear in pure stands / mixed stands ✓
- Trees produce hard wood / forests are made of hard wood species ✓
- Trees take long to mature about 60 yrs. ✓
- Trees form shady canopies to prevent sunlight ✓
- Trees have buttress root system to support the giant trees ✓
- There may climbing plants like lianas. ✓
- Trees have little <sup>or</sup> ~~external~~ undergrowth max 4mtrs

7mks

4

## 2(e) Factors for the growth of Equatorial forests (for every factor the student should give a product)

- Heavy reliable rainfall that is well distributed that favours the growth of evergreen forests, its
- Hot and constant temperatures of about  $27^{\circ}\text{C}$  that lead to rapid growth of forests that produce hard woods.
- High levels of relative humidity about 80% that makes the ground moist retentive leading to growth of luxuriant forests.
- Relatively low Altitude with humid conditions that lead to growth of tall trees.
- Deep weathered fertile soils that encourage the growth of evergreen forests.
- Gently sloping landscape with fertile soil with high water retention that contribute to growth of giant trees.
- Supportive government policy of conserving forests, gazetting forest reserves lead to existence of evergreen forests.
- Existence of pests in the forest that due to discourage settlement

## 2(d) Causes of forest disappearance in Africa.

- Need for land to carry out agriculture that is opening up large tracts of land for commercial farming in Nigeria, Liberia results in cutting of forests.
- Extensive lumbering activities in the Congo forest, Gabon to provide timber for construction.
- Increased urbanisation on the coastal areas of Nigeria and Ghana leading to clearing of forests.
- Overgrazing of wild animals like

2(d) Elephants that destroy woodlands, in most National parks like ~~virunga~~ e.g. congo.

- Bush burning in the ~~savanna~~ pastoral areas of west Africa that destroys grass.

- Overgrazing of domestic animals in Sudan by the ~~Dinka~~ pastoral groups.

- Mining and quarrying in Ndola mines in Zambia ~~e.g.~~ leads to destruction of forest and woodlands.

- Harvesting of fuel wood for domestic heating and industrial heating especially in Enugu Nigeria ~~e.g.~~

- Dumping of waste materials in South Africa mining areas like Kimberley ~~e.g.~~

- Road construction - APC ~~ld m/s of~~

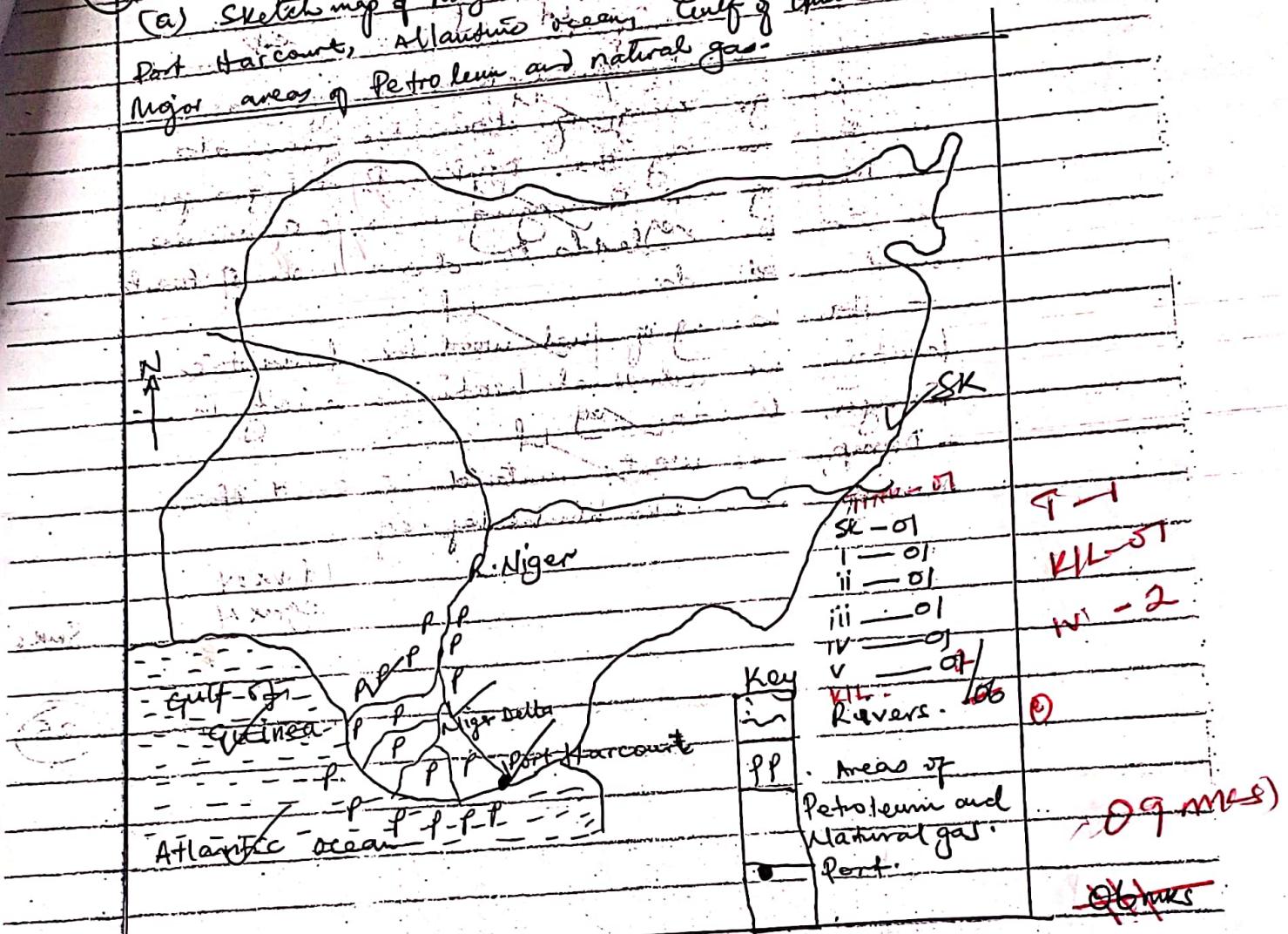
- Establishment of industries ~~e.g. round~~ ~~eg m/s of~~

- Wild fires ~~of~~ often in sahel region

- Pest and disease outbreak ~~e.g.~~ eastern Africa

25

- 3 (a) Sketch map of Nigeria showing Niger Delta Port Harcourt, Atlantic Ocean, Gulf of Guinea and major areas of petroleum and natural gas.



- (b) Factors that have favoured oil production:

  - Existence of large oil reserves to support commercial oil drilling ex
  - Presence of high quality oil with low sulphur content which is highly demanded on world markets &
  - Relatively flat land slope that enables laying of pipelines and oil rigs ex
  - Reliable water supply from river Niger used in cooling oil drilling machinery ex
  - Availability of huge sums of capital provided by oil majors to buy oil rig facilities and pay labour.

- (b) - Improved, effective and efficient transport and communication network such as pipelines used for movement of oil to oil refineries  
 - Availability of skilled and semi-skilled labour such as oil drillers to work in oil fields.

Ques 3f

Ex. At 3f Banks

(c)

- Contribution of oil mining to Nigeria
- Source of government revenue through taxation of mining companies such as shell etc.
  - Growth of towns such as Warri, Port Harcourt that provide services to people.
  - Created employment to people working in the oil fields who earn income to improve their standards of living.
  - Economic diversification hence reducing reliance on agriculture and alternative source of income.
  - Stimulated development of industrial through provision of raw materials like oil
  - Exportation of crude oil to UK and USA brings in foreign exchange used to provide services
  - Encouraged the development of infrastructure such as railway lines that facilitate trade.
  - Promoted International co-operation between Nigeria and UK through international trade widening market for other commodities.

Ques 4f

ds 4f

Banks

- ~~See~~
- 3 (d) Problems resulting from our dependence on oil production
- Neglect of other sectors like agriculture leading to famine
  - Price fluctuations leading to unstable foreign earnings
  - Overexploitation results into exhaustion
  - Large scale exploitation results in pollution and deforestation
  - Quotas imposed on oil producing countries narrows the market leading to low incomes
  - Increase in illegal migrants from Africa that results in insecurity and congestion
  - fight of oil revenue to other states results in violence leading to loss of lives

Some

25

(4)(a) calculations

Ethiopia

$$\frac{10000 \times 360}{50338} = 71.5^\circ$$

DRC

$$\frac{6700 \times 360}{50338} = 47.9^\circ$$

Nigeria

$$\frac{28200 \times 360}{50338} = 201.6^\circ$$

Swaziland

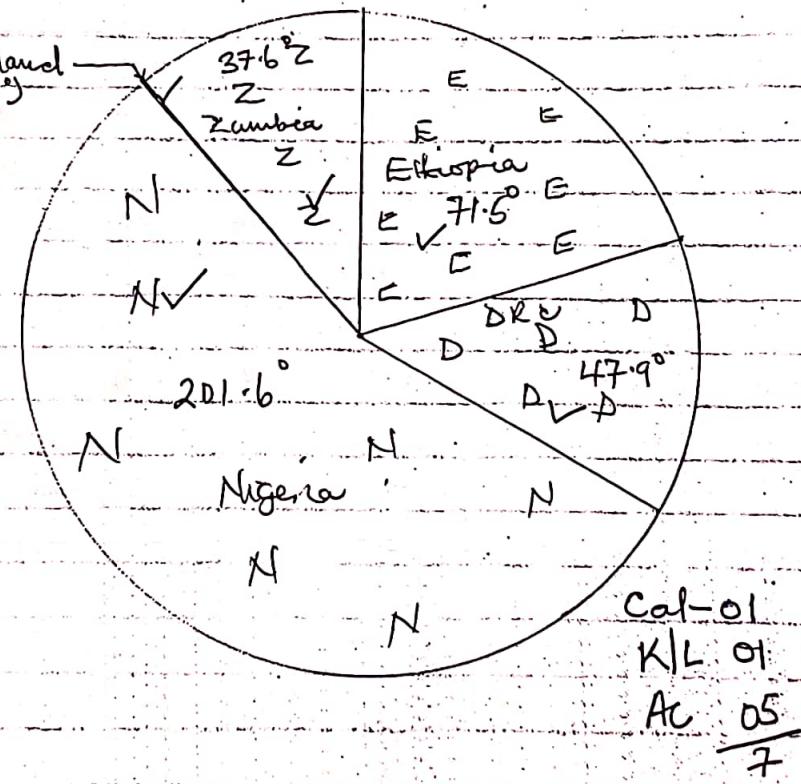
$$\frac{178 \times 360}{50338} = 1.3^\circ$$

Zambia

$$\frac{5260 \times 360}{50338} = 37.6^\circ$$

cal - 01

A Pie chart showing land under permanent crop in selected African countries.



(b) Ethiopia ✓

- coffee ✓
- sugar cane
- sisal ✓
- rice
- oil seeds

Nigerian ✓

- oil palm ✓
- sugar cane
- cocoa ✓
- Rubber ✓
- Bananas ✓

Note the students should mention the country.

2 min for crops

1 min for entry

3 marks

4(c)

### 14(c) Factors for the growth of permanent crop

- Nigeria - student mentions the crop. (1)
- Presence of fertile soils that are deep weather that foster rapid growth crops that are high yielding.
- Availability of heavy rainfall that is reliable supporting sustainable growth leading to high yields / output.
- existence of plenty of water from river Niger used to irrigate areas for planting.
- gently sloping landscape that favours mechanization leading to high output
- Existence of vast land for establishment and expansion of farms.
- High levels of humidity that makes the ground moist relentless for rapid growth of crops.
- Low Altitude around the coast areas with hot humid conditions for faster growth of crops.
- Hot temperatures of about  $24^{\circ}\text{C}$  that foster growth and ripening of crops.

level off

Ques 3

Ans

### (d) effects of agricultural activities

Students must mention the activity and attach it to the effect.

Positive effects.

- Irrigation in Ethiopia has provided food stuff like rice for the local population.
- Marketing of farm products has provided employment opportunities to marketing agents leading to obtaining of incomes etc.

(4) Marketing of agriculture products and movement  
of it to markets has led to development of

modern transport network for example the roads that link farms to towns etc

- processing of farm output has led to the growth of agro-based industries like breweries, confectioneries and mills etc

- Planting of oil palm, cocoa forms artificial forests that conserve the environment, the soil and modify climate etc

- Selling of farm output leads to earning of local income that improves standards of people.

Negative effects

(Ans 2)  
(Expt 2)

Monoculture and intensive cultivation leads to soil exhaustion lowering output.

- Weeding, planting and harvesting of crops accelerates rural-rural migration by attracting workers leading to insecurity etc

- Application of fertilizers and pesticides leads to pollution of soils and water etc

- Use of irrigation farming leads to soil erosion and easy spread of diseases etc

- Cultivation and expansion of farms leads to deforestation resulting to low rainfall etc

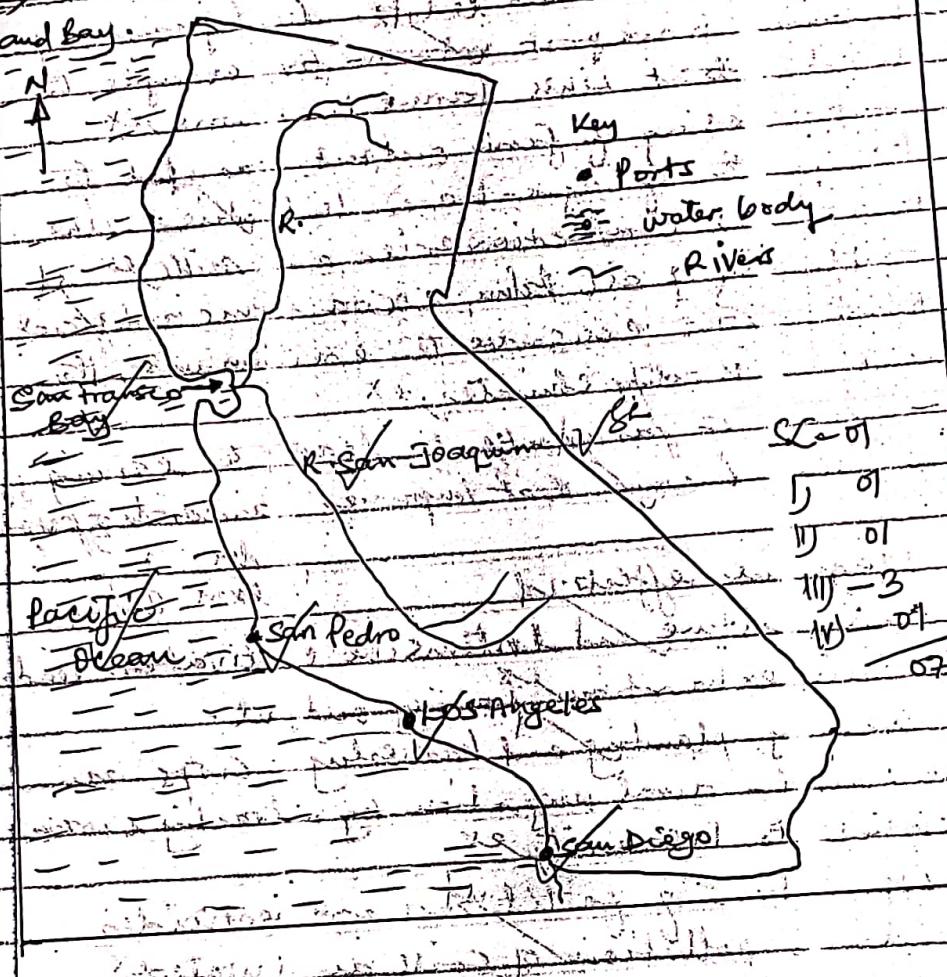
(Ans 02)  
(Expt 02)

8marks

25

## NORTH AMERICA REGION I

(5) A sketch map of California showing rivers, ocean ports and bay.



(b) factors that have favoured fishing in California:

- Extensive continental shelf with a variety of fish species
- Long indented coastline with many offshore islands to favour fish multiplication and breeding
- Plenty of plankton which is food for fish
- supportive government policy to diversify the economy from agriculture to fishing and construction of ports
- ready market for fish and fish products consumed by the large population and the surplus is export to UK
- Use of modern technology to carry out

(b) fishing like echo-sounders, flood lights to

carry out fishing.

- Adequate capital invested in buying fishing vessels and construction of fish processing industries.

- Skilled and semi-skilled labour to carry out fishing, to process fish and market fish products.

Ques 3

Ans 3. Obj. 3

(c) Importance of fishing industry.

- Source of government revenue through taxing fish co-operatives etc.

- Source of foreign exchange through fish exports to other countries.

- It has led to the development of urban centres like ports like San Diego these provide services to the people.

- provision of employment opportunities to fish transporters through this earn incomes to improve their standards of living.

- It has led to infrastructure development such as railway, roads these facilitate trade.

- fishing has promoted international co-operation and trade between California and her trade partners like UK etc.

- fishing has promoted industrial development in form of fish processing at San Diego hence providing employment and consumer goods.

- Source of medicine for example insulin and cod liver oil.

- It is source of food with a lot of calcium leading to improved standards of living.

Ques 3

Ans 3

Obj. 3

### 5(d): effects of fishing activities on the physical environment.

- overfishing from fishing grounds leads to depletion of fish species/fish stock.
- fish farming leads to destruction of wetlands
- indiscriminate fishing methods cause deaths of aquatic life.
- destruction of natural vegetation/forests to get timber for road marking
- fish processing at ports like San Diego leads to pollution of water bodies by leaching fumes and waste water from the processing plants.
- sport fishing destroys fish breeding areas.

no (10 marks)

25

GFS

A BAR CHART SHOWING THE CARGO ITEM REACTIONS  
WEIGHTS AND CANVAS.

Medium  
Tones  
1/160

16000

14500

12800

11200

above

8000

6400

4800

3200

1600

0

Freight  
Cargo  
Linen and  
Steel  
Others

T-01  
H-01  
V-01  
AC-03  
016

(6) a graph → (bunks)

(b) Conditions for growth of iron and steel industries

- Presence of plenty of power like H.E.P from Niagara fall for running machines and processing raw materials.
- Improved transport and communication network in form of roads and sea way for movement of raw materials to industries and distribution of finished goods to the market.
- Ready Market to consume manufactured goods in vast job.
- Highly skilled and semi skilled labour to work in the industries like operating machine, loading and off loading.
- Abundance of raw materials like iron ore from Massabi ranges used in iron and steel industries.
- Plenty of water from the great lakes used as coolant in iron and steel industries.
- Supportive government policy of allocating land and enabling policies to encourage industrial development.
- Use of modern technology such as auto machines, conveyor belts to manufacture goods.
- Large tracts of land that enabled location and expansion of industries.
- Adequate capital to purchase raw materials, Industrial Machinery and pay labour.

Ques 3

Ques 3

Ques

(Q3)

### (c) effects of industrial development on the Environment

Possitive effect

- Foreign exchange is earned through exportation of manufactured goods
- economic diversification thus creating an alternative sources of incomes
- Provision of manufactured and consumer goods to the community to improve their standards of living
- Source of government revenue through taxation
- created employment opportunities to workers like engineers hence they earn incomes to improve their standards of living
- It has encouraged development of infrastructure like roads and power stations leading to economic development.

(Ques 2)  
exm 2 4p

### Negative effects

- Pollution of water, land and air leading to loss of life
- loss of biodiversity due to deforestation during construction of industries
- Traffic congestion slowing down trade and commerce
- Increased accidents due to smog leading to loss of lives and properties
- Decline of water table due to massive extraction and excavation to develop industries
- Slum development with high crime and compromised standards of living

(Ques 2)

(exm 2) 4p

08 m/s

#### 6(d) Steps to Improve the Industrial Sector:

- Recycling and treatment of wastes to control pollution!
- Use of Containers at ports to reduce congestion
- Legislation on the levels of Industrial and vehicle fumes to regulate pollution.
- Use several energy sources such as Nuclear and Solar to reduce overdependence.
- Strengthen Security to fight crime.
- Re-locate Industries from major cities to regulate pollution.

unit 5 wks

25

7(c)

(i) States of the old cotton belt: Include Georgia, Alabama, Mississippi, South Carolina, North Carolina and Tennessee.

(ii) New cotton growing area: California, Arizona, Texas, Oklahoma and Louisiana.

(b) Problems faced in the old cotton belt:

- Soil exhaustion due to Monoculture <sup>WIC</sup> leading to reduced farm output.
- Shortage of human labour after the abolition of slave trade.
- Outbreak of pests for example cotton boll weevil, cotton boll borer these reduced productivity and quality.
- Outbreak of diseases such as bright <sup>What</sup> <sup>lowering</sup> quality of cotton.
- Severe soil erosion lowering soil productivity.
- Competition for land with other crops for example Soya beans, Peanuts etc.
- Strong winds like the Hurricanes that destroyed cotton plants.
- American civil war of independence disrupted cotton growing like burning harvests.

Ques 4  
ex op

8 marks

(c) Steps taken to improve cotton growing  
- mechanisation of farm activities to increase output rates

- crop diversification to improve land productivity like soya beans, rice and vegetables.

- Crop rotation to improve soil productivity

- Application of organic and inorganic fertilizers to improve soil fertility

- promotion of irrigation farming in the drier areas of California and Texas.

- regular spraying using pesticides to mitigate the effects of pests.

- Co-operative farming to bargain for fair prices.

- shifting from old cotton growing areas to new growing areas to improve cotton productivity

- use of migrant labour

- maintaining political stability

(d) contribution of cotton growing

- provision of raw materials for industries like textiles.

- employment opportunities hence income to better standards of living

- source of government revenue through taxation of co-operative societies

- Cotton exports to UK earn foreign exchange

- creation of market for industries producing agricultural inputs like fertilizers.

- urbanisation with associated advantages like trade and commerce.

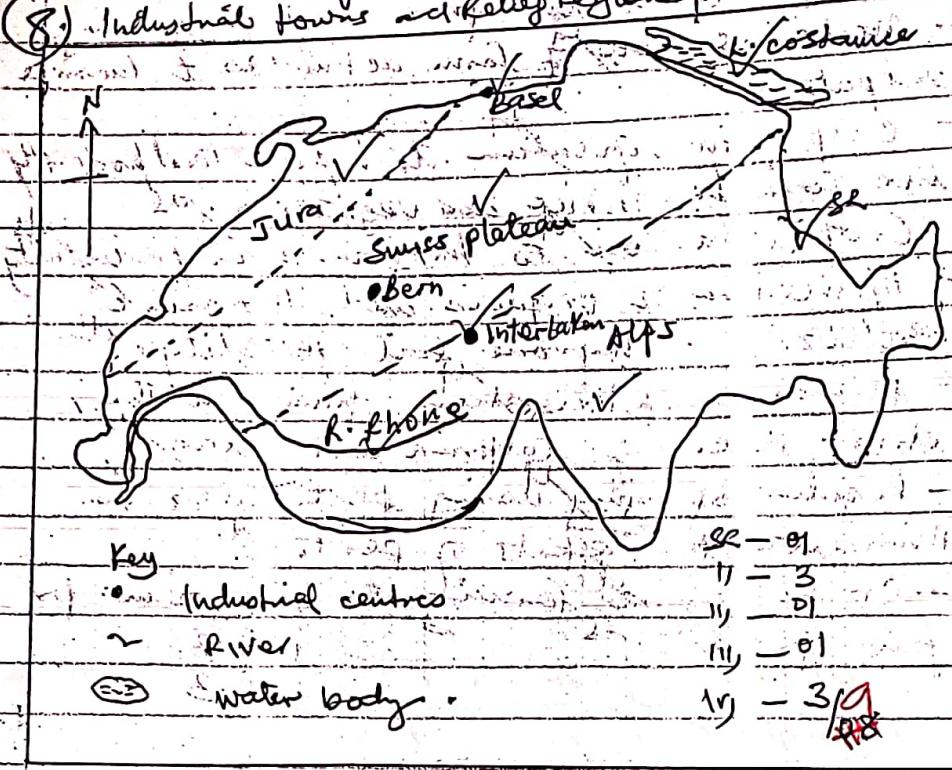
- development of infrastructure like roads leading to improved trade and commerce.

5 mrs

## Region 2 RHEINGE LANDS

A sketch map of Switzerland showing Lake, River

### Q.) Industrial towns and Religions



(b) How Switzerland has managed to develop her manufacturing sector.

- Use of raw material saving technology to reduce the high cost of importation of raw materials.
- Recycling of wastes for reuse as raw materials.
- use of advanced technology such as automation of industrial activities to manufacture goods.
- Use of abundant agricultural raw materials such as milk hides for leather and foot wear industries.
- Concentrate on production of high quality goods like pharmaceuticals, watches that require limited raw materials.
- Use of various sources of energy like HEP, Nuclear, thermal energy which is

(8) is used to run machines and storage of pharmaceutical products.  
- carry out intensive research which involves innovation and inventions of high quality products like bio-technology  
- use other water resources as raw materials and inputs in the brewing and soft drinks like coca cola, fespi cola.

Ques 03

Ans 03

Banks

### (c) Importance of Manufacturing Industries

- Employment opportunities to workers who obtain income to improve their standards of living
- Source of foreign exchange earned through export of manufactured goods like pharmaceuticals.
- Promoted International and bi-lateral relationships hence wide market for other goods.
- Source of revenue to the government by taxing Industrial Complexes.
- Economic diversification reducing over reliance on agriculture hence alternative

#### Source of Income

- led to the development of infrastructures such as roads, airports and power stations that facilitate mobility, trade and commerce.
- Urbanization lead growth of towns like Bern which offers Social Services like accommodation etc
- provider of consumer and capital goods to the public such as pharmaceuticals leading to improved standards of living etc

### 8(d) Problems faced by Industrial Sector

→ Shortage of labour due to small population  
hence hiring of labour is expensive.

→ rugged terrain in the Alps that restricts establishment of large industries.

→ Limited market internally due to low population.

→ Limited local supply of minerals leading to reliance on imported raw materials results into high costs of production.

→ Stiff competition with other countries producing similar products.

WT ~~25~~ mle

25

10(b)

1000  
1000  
1000

A line graph to show carot tonnage in Mother land between  
2018 = 2022.

900

800

700

600

500

400

300

200

100

2018 2019 2020 2021 2022

Years

H.S  
V.S  
AC/DS

TONNES

(a) (i) Countries through which the Rhine water way passes:

- Switzerland
- Germany
- Netherlands

Balks

(ii) Ports along the Rhine water way:

- Basel
- Duisburg *Neuss*
- Mainz
- Cologne
- Rotterdam
- Mannheim

Wx

Zurich

(b) Factors for the development of the Rhine water way:

- Existence of many navigable tributaries from the upper reaches in Switzerland through the Rhine rift valley and the gorge to the North Sea.
- Presence of large productive hinterland hence handling large exports and imports.
- Ice-free conditions enabling its usage throughout the year.
- The presence of ~~extensive~~ permanent river Rhine and its tributaries with large volumes of water to be used for transport.
- Availability of large sum of capital to buy construction materials and maintenance of the canals and river channel.
- Skilled labour used in their construction for example water engineers and civil engineers to construct the sea way.
- Use of modern technology used in construction cargo handling services and use of radders.
- Low tidal range
- Cooperation
- Good relationship b/w 3 countries

### (c) Importance of the Rhine Water way.

- It is Switzerland's outlet to the whole of Europe and the world at large solving the problem of landlockedness.
- It has led to the development of ports and cities like Rotterdam and Basel thus opening up a wider and rich hinterland.
- It has created a large market in the interior of Europe encouraging trade.
- Promotes tourism by providing cheap and effective transport means.
- It is a source of water for domestic and industrial uses.
- It has attracted settlement along its course hence urbanization.
- It is a source of revenue to the government from tolls levied on the Rhine users.
- It has promoted industrial growth and development in Europe for example the Ruhr Industrial area.
- It is a cheap form of transporting bulky commodities for example iron ore from Africa hence promoting trade.
- ~~Promoting exports among countries that share the river~~ <sup>like 3 countries</sup> ~~use the river~~ <sup>like 3 countries</sup> use the river.

### (d) Problems faced by the people who live the Rhine bank.

- Congestion of vessels on ports hence causing delays.
- Seasonal and periodic flooding in the

(g)(d) in the lower reaches of the R. Rhine

- some sections of the Rhine water way are narrow for example in the Rhine Gorge; the mouth is shallow limiting navigation

- obstacles of waterfalls and rapids in the upper section of the R. Rhine interrupt its use

- oil spills that cause water pollution and smog limiting effective use.

- seasonal freezing during winter especially in its upper course

max 0.5m/s

25

### (10) (a) Percentage changes:

Vegetable Percentage change white cabbage  
 white cabbage =  $\frac{\text{New} - \text{old}}{\text{old}} \times 100$

$$\frac{99 - 41}{41} \times 100 \\ = 141.4\% \checkmark$$

$$\text{Lettuce} = \frac{239 - 179}{179} \times 100 \\ = 33.5\% \checkmark$$

$$\text{Tomatoes} = \frac{104 - 85}{85} \times 100 \\ = 22.3\% \checkmark$$

$$\text{carrots} = \frac{935 - 203}{203} \times 100 \\ = 360.5\% \checkmark$$

$$\text{Onions} = \frac{138 - 92}{92} \times 100 \\ = 50\% \checkmark$$

(b) Graph-

(i) This is intensive commercial farming where crops like tomatoes are grown near and for sale in the urban centres.

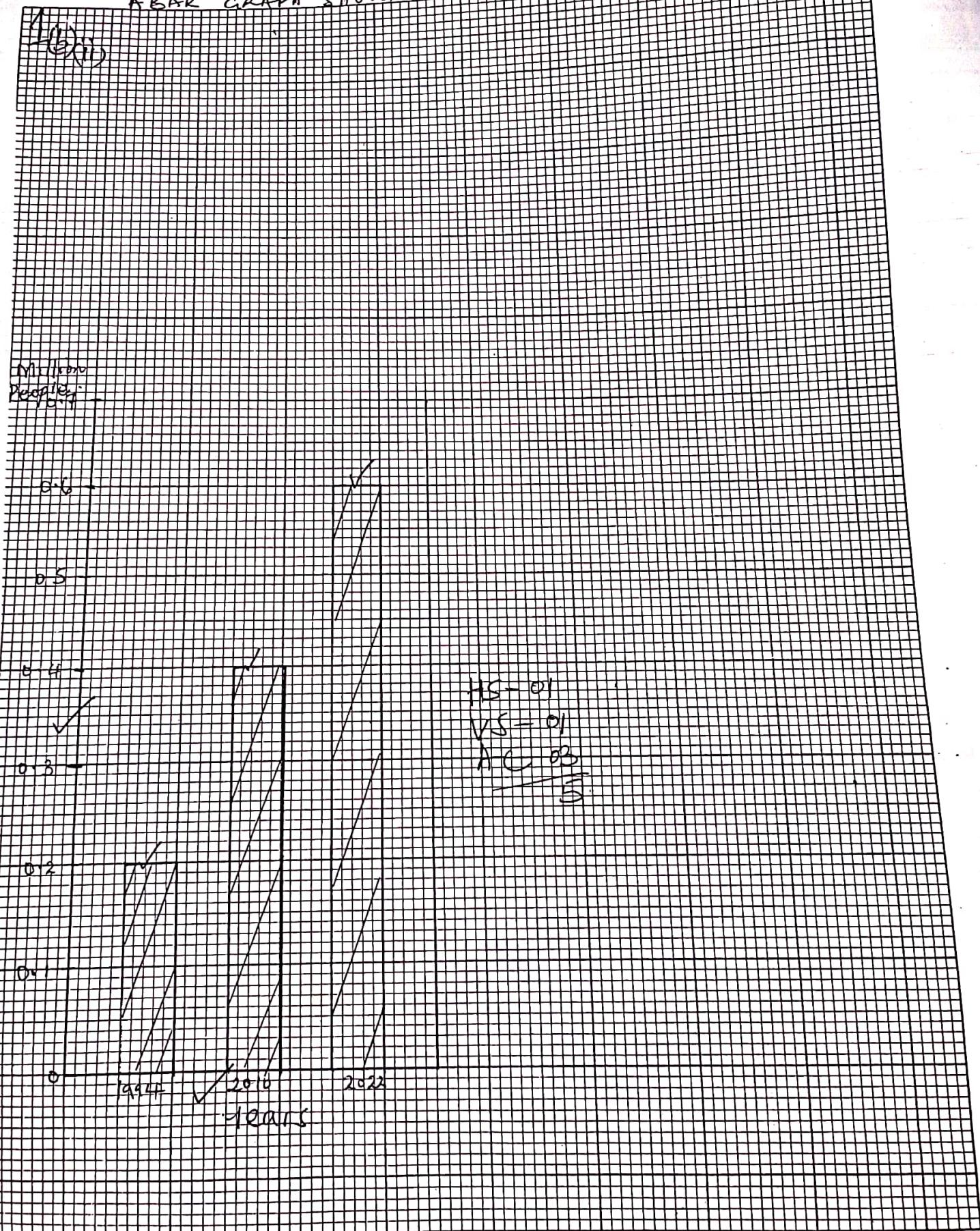
(ii) conditions that have favoured market gardening in Khetri lands:

- Extensive reclaimed land to establish and expand farms;

- Hot summers that support crop ripening and mild winters that encourage rapid growth of crops.

- Relatively flat landscape in the folders that enables mechanization and gravity irrigation.

A BAR GRAPH SHOWING THE POPULATION OF RENONI CITY



#### (IV) (c) (ii) Conclusions Cont'd.

- Availability of fertile alluvial soils that encourage the growing of different vegetables leading to high yields.
- cheap skilled and semi skilled labour to work on farms but is to plant, weed and harvest the vegetables.
- plenty of water for irrigation obtained from lakes and rivers.
- Use of modern technology such as tractors, refrigerated trucks, cold rooms for storage to prolong the life of fruits.
- Modern transport network by railway air road and canal to market and distributor the crops.
- adequate capital to invest in purchasing farm machinery, farm chemicals and fertilizers.
- Ready market to consume vegetables.
- supportive government policy by giving subsidies, tax incentives leading to high production.

Ques 3  
Ans 3  
discuss

old mix.

#### (d)

- Polythene bags hinder market growth, high costs of maintaining farms leading to reduction in profit and increase in production and expensive land for expansion.
- Salinization of soils due to irrigation and intensive cultivation leading to desertification.
- Soil exhaustion due to intensive cultivation lowering yields.
- Price fluctuations leading to loss of profits.
- Pests and diseases that destroy crops.
- Pesticide
- Competition from other producers.
- over production leading to wastage.

Ans 3  
ex 3

banks

### Region III: CHINA.

#### (1) Calculations

(i) Number of people in

$$- \text{Brigade} = 300 \times 10 = 3000 \text{ people}$$

↳ commerce + 2 3000 \times 5 = 15,000 people

↳ Area of land for grain 200 ha

Area for commerce

= 200 \times 5 = 1000 ha

↳ 1000 ha = 1000ha Quads

↳ Area of land for grain 200 ha

Area for commerce

= 200 \times 5 = 1000 ha

↳ 1000 ha = 1000ha Quads

(2) Characteristics of Commerce / Consumer Farming

Communes are Money & communally collectively

Communes are state owned and controlled

and buy also

- Communes provide social services like education

- There is diversification of agriculture and industrial

- There is use of scientific methods of production

which includes use of machinery and fertilizers

- A lot of research is done in communes

Communes produce their own food

processing of agricultural produce is done

on communes.

Training of workers to use modern methods

of farming and machinery.

Communes have many

on the available land. Many are self dependent

- **High training workers**

↳ China has more than 500 million

highly trained workers

↳ China has more than 500 million

highly trained workers

↳ China has more than 500 million

highly trained workers

(1)(c)

Effects of communal farming on the environment.

Positive effects

+ Source of revenue for the government through taxation to develop infrastructure.

- provision of food for the large population

- leading to self sufficiency and

- provision of employment opportunities to improve

the standards of living.

- Source of raw materials for the agro-based industries like dairy industry, milk cheese.

- Industries like dairy industry increase through exports.

- Source of foreign exchange through exports.

### Urbanisation associated benefits

(see Q2)

- Negative effects -

- Communes lead to destruction of vegetation

that results into soil erosion

- Monocultivation leads to soil exhaustion

- Low yield production or

- Use of farm chemicals leads to soil pollution,

- It leads to easy spread of pests and diseases

- that destroy crops and

- over exploitation of resources like water

- owing its water table

(See 2)

4

8 m

(d) i) communes in China

- Red light commune - Fuan Ting Peoples Commune.

- Chanshan commune - Yangtan Commune.

- Hanoi commune.

2m

11

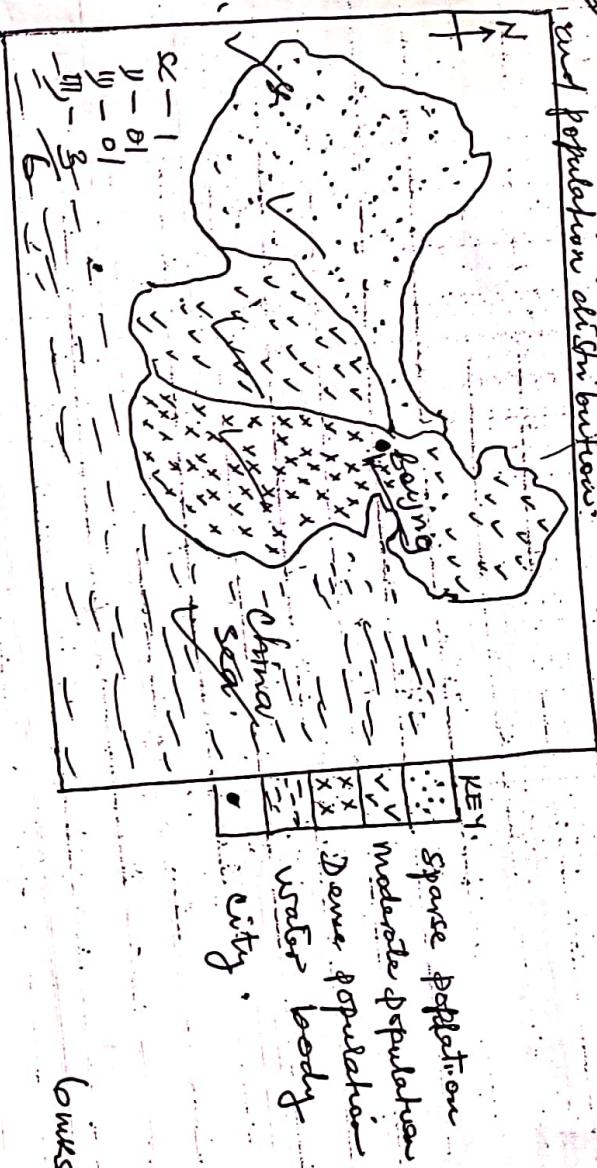
(d) (ii)

- steps being taken to conserve the environment on the farms in China
- encouraging terracing where the land slope is steep
- construction of embankments on rivers to control flooding
- application of practices to conserve the soils
- tree planting to modify climate
- use of organic manure to boost soil fertility
- planting cover crops and legumes to conserve soil
- pack earth fencing method

25

14

(12) A sketch map of China showing China sea, Beijing city and population distribution.



(b) Factors for dense settlement:

- + presence of fertile soils in the river valleys such as Yangtze to promote agriculture hence attracting dense settlement.
- + gentle slopes and China plains that encourage easy construction of basic infrastructure like roads attracting dense settlement.
- + wide range of minerals in Eastern China that attract people for employment in mining industry hence dense settlement.
- + presence of plenty of surface water for domestic, industrial and agricultural use attracting dense settlement.
- + well developed transport and communication that is air ports, ports made to facilitate different ultimate trade products.
- + supportive government policy of starting business and re-distributing people in agriculture zones.
- + presence of better health services like health insurance that attract a large population.
- + wide employment opportunities in mining, industry and agriculture attracting dense settlements.

12(c)

Problems associated with dense population settlements:

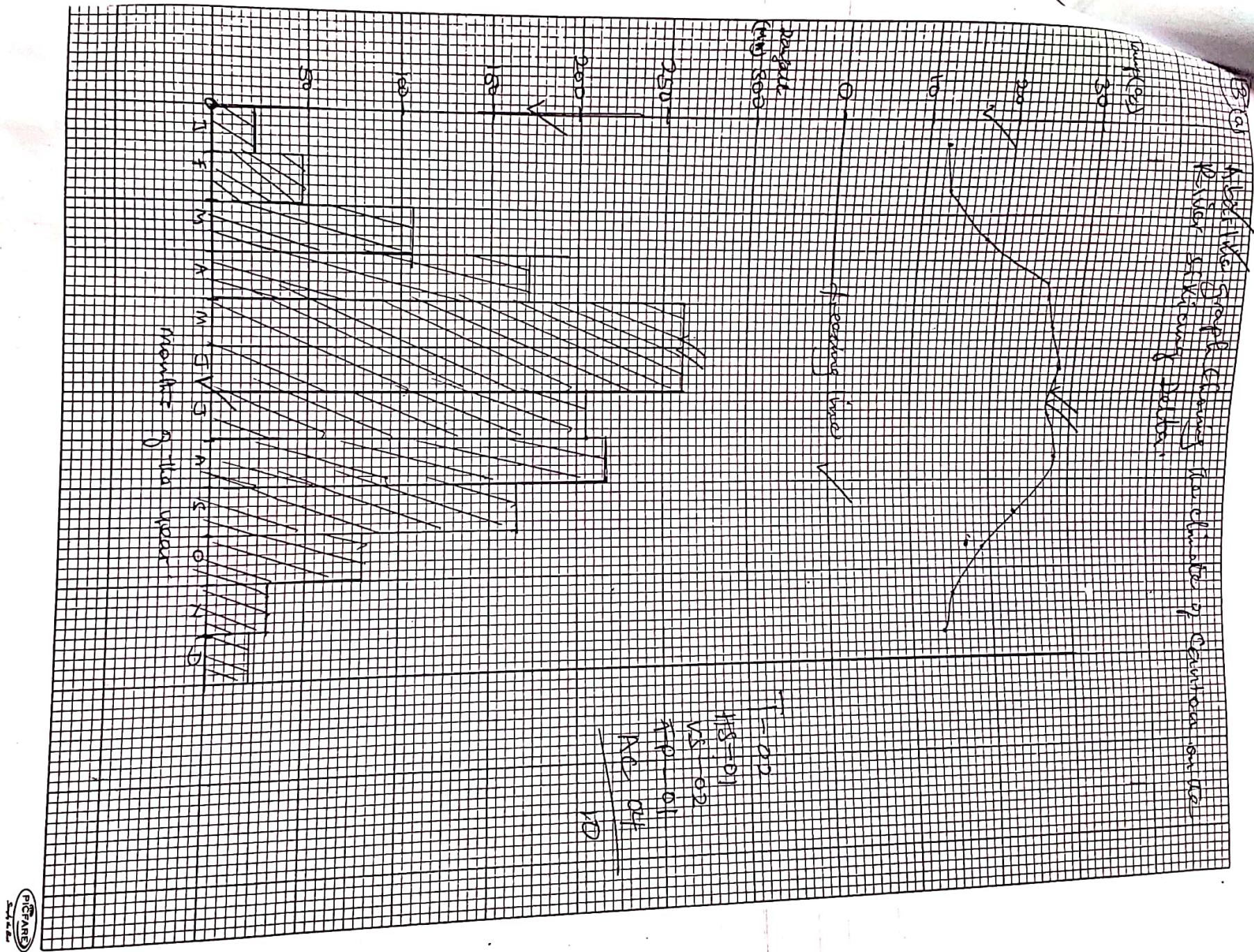
- High levels of unemployment. Leading to idleness and unemployment leading to early spread of diseases
- Poor sanitation leading to early spread of diseases
- High pollution levels of air, land and water which becomes a health hazard.
- High cost of living due to shortage of services and goods.
- Congestion in public places leading to easy spread of diseases.
- Pressure on the existing land leading to land fragmentation with associated effects like limited accommodation leading to growth of slums with their associated effects etc.
- Deforestation to create land for settlement resulting into low rainfall leading to flooding.
- food shortages leading to famine.

Ques 3

Solutions to the problems:

- (a) Solutions to the problems:
  - Adopt a policy of population control through family planning to reduce population and pressure on land.
  - Establish planned settlements in villages and towns.
  - Construction of high sky scrapers to reduce congestions and pressure on land.
  - Modernisation of agriculture to supply food to people.
  - Importation of food to supplement domestic resources.
  - Diversification of the economy to promote mining and industrialisation.

ABC like Stock Chart showing Relative Price Change



13<sup>th</sup>

Graph

longitudes

- The students should name all the axes.
- The students should mark clearly the freezing point.

13<sup>th</sup>

Ques

$$\text{Mark} = \frac{23 + 48 + 107 + 173 + 269 + 269 + 205 + 219}{165 + 86 + 31 + 23}$$

$$= 16.8 \text{ mm. June}$$

$$(ii) \text{ MAT} = 13.3 + 13.9 + 17.2 + 26.1 + 27.2 + 28.2 + 22.8 + 28.3 \\ + 23.9 + 19.0 + 15.6 + 14.0$$

$$\text{R. range} = 24.2^{\circ} \text{ June}$$

$$(iii) \text{ ART} = (\text{Highest temp} - \text{Lowest temp}) \\ = 28.3 - 13.3 = 15^{\circ} \text{ June}$$

### (c) characteristics of the station

- The wettest months are May and June
- The coldest month is January with  $13.8^{\circ}\text{C}$
- The hottest month is August with  $28.3^{\circ}\text{C}$
- The mean annual rainfall for the Station is 1618 mm per annum
- The mean annual Temperature for the station is  $21.2^{\circ}\text{C}$ .
- The annual range of temperature is  $15^{\circ}\text{C}$
- The station according to the graph experience single maximum between April to July.
- Raise in temperature leads to heavy/rise in rainfall.

Ans