MATIGO EXAMINATIONS BOARD



GEOGRAPHY MARKING GUIDE 2023 PAPER 2

Qn	Answer	Marks
1(a)(i)	Ocean marked C	01
	Atlantic ocean/South Atlantic	
(ii)	River marked 1	01
	• River Ogoue	
(iii)	Towns marked 2,and 3	02
	• 2 is Libreville	
	• 3 is Port Gentil	
(iv)	Country marked 4	01
	• Equatorial Guinea	
(b)	Explain the physical factors which have favored the development of forestry in areas marked A and B in Gabon	06
	Existence of extensive/large land in which the forests grow.	
	• Existence of numerous rivers like ogue, Lungue Burgo that modify the climate through rainfall formation and supports transporting of the logs.	
	• Existence of numerous tree species that are highly demanded e.g ozigo, mahogany, ebony.	
	• Favorable climate with reliable and heavy rainfall of over 2000mm that support the growth of tall trees and hot temperatures of over 25°C for maturing of the trees.	

	 The existence of relatively flat landscape which facilitate the construction of transport routes particularly road network and railway—which connect lumbering centres to processing centres at the coast. This ensures continuous supply of wood and wood products like timber. The existence of fairly fertile soils which have supported the growth of various tree species like Okoume, and Ebony—in turn favoring the supply of wood and thus encouraging lumbering in Gabon. The sparse population / low population density which has favoured continued existence of forests. The population density is about 6 people per sq km and this means that vast areas of natural forests The existence of fairly fertile soils which have supported the growth of various tree species like Okoume, and Ebony—in turn favoring the supply of wood and thus encouraging lumbering in Gabon. Identification 03 MAX Explanation 03 MAX Explanation 03 MAX Total = 06 Marks 	
(c)(i)	 (b) Explain the: (i) Causes of forest destruction in Gabon Rapid population growth rates has led to encroachment of forests for settlement and cultivation purposes. There is damage caused by wild grazing animals like elephants through browsing, trampling and breaking of tree species. Some tree species in the forests are affected by pests and diseases leading to their destruction. The increasing demand for firewood and charcoal has led to increased forest destruction in Gabon. The increasing demand for expensive furniture around Gabon and other parts of the world has led to forest destruction. Illegal logging of trees without control has also led to forest destruction due to demand for building materials like timber. Any 5 Explained × 1 = 05 marks	05
(ii)	 Explain any four ways the government of Gabon has taken to conserve forests Exploitation of forests further inland due to exhaustion of forests near the coast. Re-afforestation programs in areas where forests have been depleted/exhausted. Growing fast growing / maturing trees such as eucalyptus which have a gestation of 1215 years. 	04

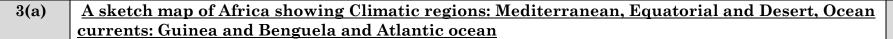
	Diversification of exports by the government and encouraging cash crop production like cocoa, coffee,	
	ground nuts, rice to reduce over dependence on timber exports.	
	The government has also emphasized mineral exploitation such as uranium, manganese, and iron ore,	
	to reduce over dependence on timber exports.	
	• Construction and rehabilitation of roads and railway lines to increase accessibility to forest/lumbering areas.	
	• Use of protective gear to guard against accidents when feeling trees - Spraying with chemicals to control pests and diseases.	
	• Carrying market research to widen the external market for timber and timber products.	
	Attraction of foreign investors with enough capital and better technology.	
	Any 4 \times 1 = 04 Marks	
(1)		0.
(d)	Outline the contributions of the forest industry to the people of Gabon	05
	Provision of industrial raw materials for example the major product timber which is used to	
	produce many items such as wood used in the construction and boat making, furniture making.	
	Provision of medicine for certain diseases such as quinine extracted from cinchona tree, cocaine	
	got from the coca shrub, camphor –an oil distilled from the camphor tree and today used in making cosmetics, soaps and ointments.	
	• Forests provide food and fruits collected from the tropical rain forests such as ivory nuts, Brazil	
	nuts, and betel fruits. Many societies obtain gums from forests—used in the making of chewing gum.	
	Water catchment function of forests / protection of water resources because the canopies break the	
	force of rain making it percolate/infiltrate slowly into the soil causing long run water storage	
	hence development of rivers and rivers.	
	Modification of climate through the evapo-transpiration process, by recharging atmospheric	
	moisture which condenses into rain supporting—economic activities such as farming in the surrounding areas.	
	Rain forests also regulate climate by absorbing carbon dioxide and give off oxygen in the process of	
	photosynthesis; hence lessening the impact of global warming.	
	Soil conservation since the forests reduce soil erosion frequency and intensity by facilitating	
	infiltration / percolation of rain water into the soil and therefore reduced runoff.	
	• Forests bind soil particles together hence protecting them against rampant soil erosion.	
	Habitat for wild life in form of flora and fauna species. The animals and birds include: elephants,	
	buffalo, chimpanzees, monkeys, gorillas, flamingos, falcons in tropical rain forests.	
	Oujjuro, civinipunizco, monneyo, gorinius, juniningos, juncono in iropicur rum joresis.	

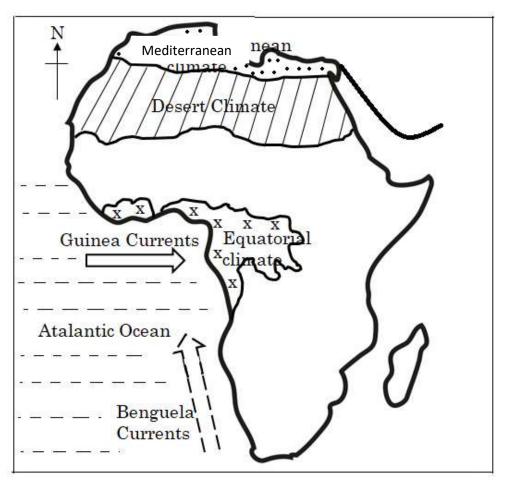
	 There are also various plant and tree species in various forests. Eventually the forests act as laboratory for research and educational studies. Promotion of the tourism sector because many forest areas have been gazetted as national parks and game reserves for example Okanda national park in Gabon to conserve wildlife. These act as places for recreation, and other tourist activities such as picnics, forest walking, camping, and viewing forest animals. Generates government revenue through the sale of forest products such as timber, rubber, and medicinal products which brings in revenue to government. The government also licenses and taxes the forest exploitation companies, workers, timber exports and other forest-related activities to get revenue that is re-invested in other sectors of the economy such as health and, education. Generates foreign exchange through the exportation of forest products such as timber, sawn wood, plywood, fibre boards, rubber, gums, to outside countries. The foreign currency generated is used to settle foreign debts and encourage importation of foreign capital and consumer goods. Promotes development of urban centres since the sawmills, pulp and paper industries have attracted a large population as workers and in turn associated infrastructure such as roads, schools, banking, recreation centres—hence development of urban centres/towns. Provision of many employment to the people such as lumber jacks, forest guards, fire fighters, supervisors, transporters, industrial workers. These earn incomes which they use to improve their standards of living. Diversification of the economy since forestry industry acts as an alternative source of income for the respective countries which creates more employment opportunities and capital accumulation. Forestry is an economic use of land where other activities are limited for example areas of little agricultural value—like the steep slopes, areas of thin soils, i	
2(a)(i)	Define the following Geographical terms	01
	Pastoralism,	
	 Pastoralism is the simplest and most primitive form of livestock rearing or a traditional way of animal keeping. 	

(ii)	Cattle Ranching.	01
	• Cattle ranching is a modern way of cattle keeping. It involves the keeping of cattle in a ranch where the land is paddocked in order to have controlled grazing.	
(iii)	Explain the Characteristics of Nomadic Pastoralism	06
	• The nomadic pastoralists often occupy the dry areas of Africa. These are the areas which receive very little and unreliable rainfall. This explains why they have to keep on moving in search of water and pasture.	
	• The nomadic pastoralists always keep large number of livestock which are beyond the carrying capacity of the land.	
	• The nomadic pastoralists graze their animals on only natural pastures.	
	• The nomadic pastoralists only keep the traditional breeds of animals which produce low milk output and poor quality of meat.	
	• The animals are kept for subsistence/survival (to take care of the family needs).i.e. they get almost all what they need from the animals e.g. milk, meat, blood. the animals also provide the beddings and dressings for the pastoralists	
	• The nomadic pastoralists often occupy the sparsely populated areas of Africa. That is why they are able to keep on moving from place to place.	
	• The nomadic pastoralists practice communal grazing i.e. the animals are grazed in a group.	
	• There is always burning of the grass at the end of the dry season in anticipation of fresh pasture at the beginning of the wet season.	
	• There is always overgrazing of the pastureland as a result of overstocking. It is common for the pastoralists to keep cattle, goats, sheep donkeys' camels.	
	• The nomadic pastoralists in most cases occupy those areas which are infested with tsetse flies a reason for them to keep on moving to try to avoid the tsetse flies.	
	• The nomadic pastoralists and their animals are always on the move to ensure sufficient pasture and water for their animals.	
	• There is no proper care given to the animals i.e. no treatment against diseases, no spraying against the pests.	
	Any 6 Explained = 06 marks	

(c)	What factors have favoured Pastoralism and Transhumance in parts of West Africa	08
	 The rainfall in this region is very low and unreliable. This cannot support arable farming therefore the only economic activity possible here is nomadic pastoralism. The Sahel region experiences long droughts which can last for about nine months which necessitates the seasonal movement of the pastoralists in search of water and pasture. The Sahel region is generally sparsely populated this gives the pastoralists the freedom to keep on moving from place to place. There is therefore vast land for them to graze their animals. There is communal ownership of land and hence free movement of the pastoralists and their animals. The Sahel region is generally a grassland area since it is partly found in the savanna vegetation areas of West Africa. This has provided the natural pasture for their cattle. The Sahel region is infested with tsetse flies which follow the rainfall seasons this has forced the Fulani to keep on moving North and South in order to keep on avoiding them. Since in the Sahel region there is always shortage of water and pasture it becomes necessary for the Fulani pastoralists to keep on moving so as to search for the water and pasture for their animals. The Sahel region is not so much blessed with water bodies like lakes for the cattle to drink from. This explains why they have to keep on moving in order to look for the water for their animals. The Fulani believe in keeping large numbers of cattle, sheep and goats which lead to overgrazing of the natural pasture land. Sometimes the movement is favored by the need to avoid mixing of livestock with those which are infected by disease. Identification 04 Marks Explanation 04 Marks = 08 Marks 	
(d)	Outline any five challenges facing the Nomadic pastoralists of the Sahel regions of West Africa.	05
	 The long droughts experienced in these areas. This is because they occupy the dry areas of Africa. There is always a problem of inadequate pasture for their animals. This comes as a result of very low and unreliable rainfall in these areas. There is a problem of shortage of water for the pastoralists and their animals. This is because there are very few water bodies like lakes in the Sahel region. 	

	 There are problems of animal pests like ticks and tsetse flies. These cause animal diseases like Nagana, Foot and mouth, East coast fever. E.t.c. There are problems of animal diseases like Foot and mouth disease which is an airborne disease. In some places there are problems of wild animals like Hyenas which attack the pastoralists and their animals. There are problems of growth of unpalatable grass due to the dry season. Any 5 problems outlined = 05 marks 	
(e)	 The concerned African countries have tried to construct bore holes, valley dams and wells in the areas occupied by the pastoralists this is in order to manage the problem of water shortage for the pastoralists and their animals. Today in most areas the concerned governments have tried to provide the pastoralists with veterinary services so as to manage the problem of animal diseases. In some countries like Nigeria, Mali and in most of the East African demonstration ranches have been established from where the pastoralists can be taught better ways of livestock rearing. Today in most African countries the pastoralists are encouraged to practice crossbreeding the local breeds with the exotic breeds of cattle so as to improve on the quality of their cattle. This improves on the milk output and the quality of meat. In most of the African countries there has been the training of agricultural extension workers whose responsibility is to teach the pastoralists better ways of livestock keeping. In some areas the concerned governments have constructed more feeder roads to improve on transport in these areas this facilitates the transportation of the animals and animal products. The Fulani are being encouraged to live a settled way of life so that they can also grow some crops. The pastoralists today are being encouraged to sell off some of their cattle in order to reduce on the number. The pastoralists are being encouraged to grow fodder crops to supplement on the natural pasture. This is done through irrigation in some areas. Any 4 × 1 = 04 Marks The tense used to be present continuous	04





(b) Describe the Characteristics of either the Guinea or Benguela ocean currents.
Guinea warm Ocean Currents: characteristics

02

- Warm in nature
- Originate from the Tropics towards the north and south pole
- Carry warm conditions from the Equator toward the areas along which they flow e.g. west coast and southeast coast.

 $Any 2 \times 1 = 02 marks$

	OR	
	Benguela cold ocean currents: characteristics	
	 Cold in nature Originate from the poles to the Tropics Carry cold conditions towards the areas they flow to e.g. northwest coast and southwest coast. 	
	Any 2 \times 1 = 02 marks	
(c)	Explain the Characteristics of the Equatorial climate regions	04
	 Receives rainfall throughout the year Has two rainfall peaks between March to May and September to November Rainfall totals range from 1500 mm and above Rainfall is convectional in nature due to hot temperatures causing evapotranspiration Temperatures are relatively hot ranging between 21°C and 23°C evenly distributed throughout the year It has a small annual temperature range of approximately 2°C (23°C-21°C=2°C) Experiences high humidity due to abundant vapour being discharged in the atmosphere throughout the year. It has dense cloud covers. Any 4 × 1 = 04 marks	
(d)	 Outline the challenges of living in semi desert and desert regions of Africa. Limited open surface water due to high evaporation rates Prolonged drought as evident in the table i.e. dry spell Deadly fauna like scorpions, poisonous snakes, etc - Airborne diseases due to dryness, storms, etc - Infertile sandy soils affecting agriculture. Any 4 × 1 = 04 marks	04
(e)	Explain the factors which have influenced the Climatic conditions of Africa. • Relief- area with mountains and highlands tend to have cool wet climatic conditions due to the interference of moist laden winds that are forced to raise forming relief rainfall on the windward side	08

and descending dry winds on the leeward on the other hand, plateaux and flat areas differ in climatic conditions due to lack of intercepting relief.

- Aspect- slopes that are directly facing the sun receive solar radiation hence tend to have high temperatures unlike the other side in the shadow zone receiving low cool temperatures
- Apparent movement of the sun- this concerns the movement of the overhead sun north or south of the equator forming a low pressure belt. On June 21st, the overhead sun in the north creates a vacuum attracting the northeast trade winds from the Arabian Desert and southeast trade winds from the Indian Ocean giving rise to the inter-tropical convergence zone. This causes high temperatures with heavy rainfall in the northern hemisphere (summer conditions) and cool conditions in the southern hemisphere (winter condition). The reverse is true on 22nd December in the south.
- Altitude- areas near the sea level (0m) tend to experience very high temperatures due to absorption of solar radiation by the earth's crust which is later reflected and scattered to the surrounding areas. Areas which are many metres above the sea level (1000m+) tend to have relatively cool climatic conditions due to moisture in the atmosphere and nearness to the condensation level. This explains the cool climatic conditions in the highland or mountain areas
- Vegetation cover- areas which are highly vegetated or are having luxuriant vegetation tend to receive cool or mild or wet climatic conditions through evapo-transpiration where vapor is released into the atmosphere forming convectional rainfall. The reverse is true in areas with scanty vegetation or bare ground.
- **Distance** from large water bodies- areas near large lakes and seas/oceans experience wet climatic conditions due to the land and sea breeze effect. This is so because moisture from either land or lake/sea/ocean evaporates to form on-shore or off-shore rainfall which is not the case in areas which are far from water bodies (this only applies where other factors don't exist).
- Latitudes- areas which are near and those crossed by the equator tend to have wet climatic conditions with a double maxima (two rainfall peaks) caused by the equinox when the overhead sun is directly

above the equator on 21st march and 23rd September. The areas that are far from the equator have a single maxima (one rainfall peak) leading to relatively dry climatic conditions.

- Prevailing winds- Africa is influenced by two great trade winds i.e. the Northeast trade winds from the Arabian desert bringing with it dry conditions that explain the desert and semi desert conditions in Somalia, Egypt, Sudan, Libya, Tunisia, etc plus the southeast trade winds from the Indian ocean bringing heavy moisture that explains the wet conditions in many parts of eastern Africa, Mozambique, Swaziland and south Africa.
- Human activities- practices engaged in by man affect the climate of an area on a micro and macro level. Activities like bush burning, deforestation, swamp reclamation, charcoal burning, etc. destroy the vegetation cover and disorganize the hydrological cycle and discharge of moisture into the atmosphere to cause rainfall. The reverse is true in areas which are not tampered with by man.
- Ocean currents- these affect climate with respect to their origin e.g. the cool currents bring cool climatic conditions in the southwestern areas like Walvis bay, Namibia and northwest coast of Tunisia, Morocco, etc. while the warm currents bring about warm climatic conditions causing convectional onshore rainfall in those areas like Durban, Natal, Mozambique, Madagascar in the southeast and Tema, Accra, Lagos, port Harcourt, etc. in the west.
- Industrialization- this concerns the discharge of dangerous gases into the atmosphere which affect the ozone layer that filters the dangerous sun rays like ultra-violet and infra-red that tend to increase atmospheric temperatures. Thus areas which are highly industrialized experience warm climatic conditions brought by the depletion of the ozone layer coupled with the emission of heat from industrial machines and vice versa where other factors are not dominant).

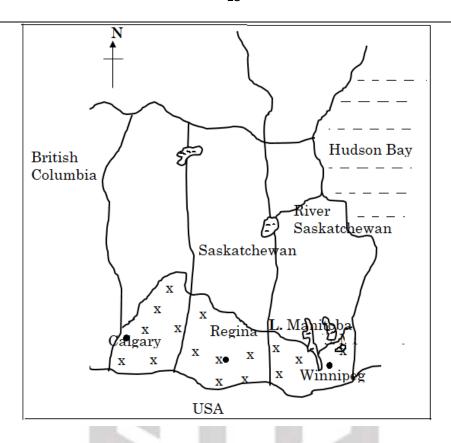
Any 4 Explained $\times 2 = 08$ marks TOTAL = 25 MARKS

4(a) Draw a line graph to represent the information in the table above (09 Marks)

Calculate the Percentage change in population between 1995 and 2019	01
NEW-OLD	
${OLD} \times 100\%$	
200,936,509 - 41,086,100	
= \frac{41,086,100}{} \times 100\%	
159,85,409	
$=\frac{41,086,100}{41,086,100} \times 100\%$	
= 389%	
Describe the trend of population growth in Nigeria between 1995 and 2019	03
Between 1955 to 2019 there was a sharp increase of 159.8 million people.	
• Between 1955 to 1965 there was an increase of 9.04 million people.	
Between 1965 to 1975 there was an increase of 13.2 million people.	
Between 1975 to 1985 there was an increase of 20.2 million people.	
Between 2005 to 1995 there was an increase of 30.9 million people.	
Between 2015 to 2019 there was an increase of 19,799 people.	
$Any 3 \times 1 = 03 marks$	
Explain the factors that have led to rapid population growth in Nigeria.	08
High fertility rates among women in developing countries, in that, many women produce more children	
in their child bearing years, yet on the other hand there is a decline in the death rate due to improved	
healthcare, causing high population growth rate.	
• Low levels of education loads to high hinth nates. The loss educated results nucleu hig families equaing	
, , , , , , , , , , , , , , , , , , , ,	
Chila-bearing period for girls.	
• Strong belief in traditions and culture (that prefer large families)/ social benefits attached to many	
of labour in the field, dowry from girls –hence producing more children.	
	NEW - OLD

- Early marriages in many developing countries. Many people marry before the age of 20 years and therefore a long child bearing period / which increases the incidence of teenage pregnancies causing a high population growth rate.
- The prevalence of polygamy in many societies leads to large families. Polygamy involves marrying more than one woman and it is also rooted in culture. It promotes competition among the women who produce more children to please the husbands—leading to a high population growth rate.
- Low levels of income/high level of poverty especially among the rural people. Most people have limited productive economic activities to occupy them and resort to producing many children—causing a high population growth rate. Studies show that the poorest people have low ambitions in life unlike the middle class who have great material aspirations in life and find large families as a burden to their achievement.
- Low status of women in developing countries. Many women are poor, illiterate and many are full-time house wives lacking viable economic roles outside home, which causes high birth rates.
- Strong influence/effect of religion, whereby some religions work against population control measures like family planning using contraceptives. This position is in line with the holly books. Still some religions encourage polygamy.
- Limited use of family planning methods in developing countries. There is limited access to birth control devices partly due to being relatively expensive / unaffordable, limited sensitization and being urban-based. This explains why the family planning methods are mostly restricted to urban women and thus the high population growth rate.
- Increasing rate of immigration. This is in form of increased number of refugees from neighboring countries attributed to wars, displacements and famine among other factors. This leads to high population growth rate in the recipient country.

	High ratio of females to males in the population, which also reinforces polygamy and high birth rates.	
	 Improved medical services and improved food supply resulting into reduced death rates. Unfavorable government policies towards population control such as failure to enforce marriage age in various parts of the country, relaxed migration laws. 	
	Identification: 04 Max Explanation: 04 Max	
(d)	 Explain the contribution of a high population to Nigeria's economy. Creates a big market potential for industrial and agricultural output, a large percentage of the population is below 60 years. Increases the potential labour force since many people engage in productive activities. Leads to optimal utilization of social and economic infrastructure in the country such as roads, railway, schools, hospitals, due to the rapidly increasing population. Encourages hard work in order to sustain the predominantly dependant population. This implies that many young people become innovative leading to increased enterprise. Leads to increase in tax potential, and thus increase in government revenue. This results from the increasing number of people and taxable activities in the country. The government is awakened to its responsibility of providing necessary infrastructure and other social services. This leads to increased output in the long run. Increases occupational and geographical mobility of the working population caused by the challenges facing them since they have to support a large number of dependants. Labour in turn becomes more productive. Facilitates the utilization of natural resources such as water resources and minerals in order to support the rapidly growing population. 	04
	$Any 4 \times 1 = 04 mark$ $TOTAL = 25 MARKS$	
	PART II: STUDIES IN DEVELOPMENT Answer two questions from this part, choosing only one question from any one region. REGION 1: NORTH AMERICA	
5(a)	A sketch map of the Canadian prairies showing Lake Manitoba, River Saskatchewan, Towns Regina, Calgary and Winnipeg and the Wheat growing regions	



(b) Describe the physical conditions that have favoured wheat growing in Canada

06

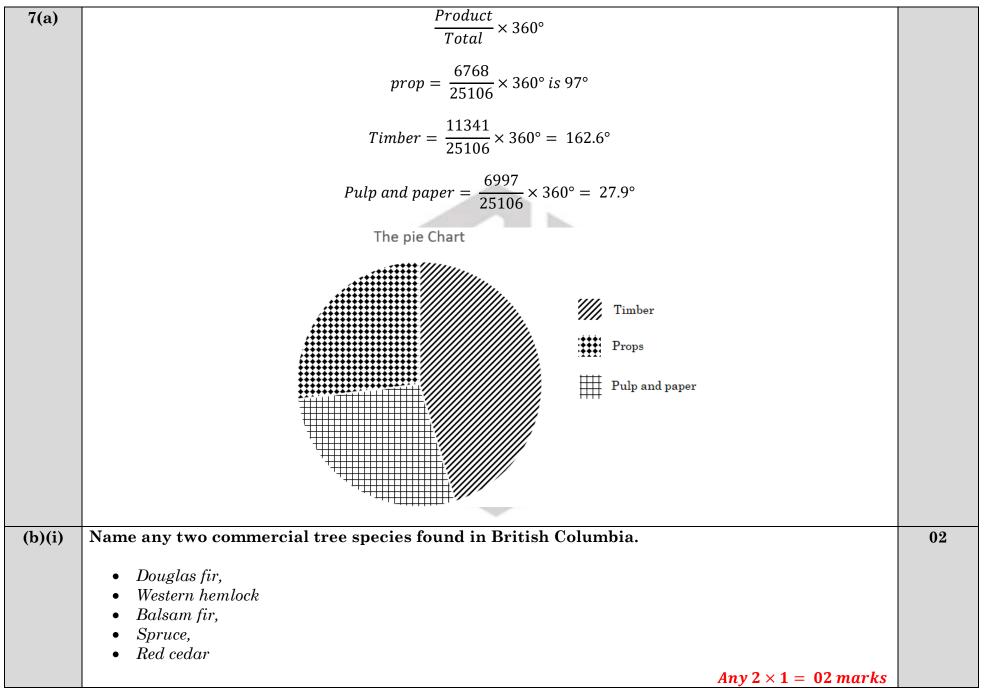
- Availability of cheap extensive land. The farm sizes are in thousands of hectares. This has allowed the growing of wheat on a large scale.
- The relatively flat or undulating landscape, this condition has favored mechanized farming on the wheat farms.
- The presence of fertile black chernozem soils. This is an ideal condition for high yields of wheat.
- The prairie region experiences high summer temperatures which are ideal for the maturering and ripening of wheat grains.
- The Prairie region receives adequate rainfall in the growing season. The total amount of rainfall is 500mm per year.
- The Prairie region has a long frost free period of 100-120 days. This is long enough for wheat growing.
- The Prairie region experiences long summer daylight good for the ripening on the wheat grain.

	 The chinook winds which blow towards the region during winter help in melting the snow and this adds moisture to the soil. The Prairie region is composed of mainly grassland. This is easy to clear and plough. Identification: 03 marks Explanation: 03 marks = 06 marks 	
(c)	 Explain the problems facing wheat growing in the Canadian prairies Sometimes there is a problem of overproduction which can lead to a fall in world market prices. There is a problem of fluctuation of prices for wheat on the world market. This discourages the farmers from growing wheat. There is competition from other wheat growing countries like India and Pakistan. There are problems of wheat pests and diseases. This affects the quality of the wheat. There is a problem of soil exhaustion due to the practice of monoculture. This leads to the reduction of the output for wheat. There is a problem of overdependence on foreign market since very little of the produced wheat is locally consumed. There are problems of occasional prolonged droughts especially on the western regions. This can delay sowing of the wheat. Sometimes there is a problem of shortage of cheap labor especially during the busy harvesting season. There are problems of competition for port facilities in some of the ports like Churchill. This causes delays in exporting the wheat. The frost sometimes affects the wheat and it also reduces the growing time. Identification: 03 marks Explanation: 03 = 06 marks 	06
(d)	 Outline the steps being taken to solve the problems in c) above. To reduce the problem of monoculture, the farmers are encouraged to diversify crop growing. Today the farmers also grow crops like rye, oats, maize and many others. Many industries have been set up to process the wheat into various products like flour, bread which can be bought by the people of Canada. Sometimes quarter system is emphasized where production levels are predetermined to avoid overproduction. 	04

	 The government is also encouraging the farmers to store excess wheat when there is over production and sold in the subsequent years when production is low. The farmers are encouraged to spray pesticides on the growing wheat in order to control the pests and diseases. To manage the problem of shortage of labor, farmers are encouraged to make use of machines. In order to off-set the problem of competition, the farmers are encouraged to improve the quality of wheat grown and also the quality of the wheat products. Any 4 × 1 = 04 marks The tense must be a present continuous tense 	
6(a)(i)	States, Rhodes island, New Hampshire, Massachusetts, Maine Vermont, Connecticut.	02
(ii)	Industrial centres, Boston, New Bedford, Hartford Holyoke, Burlington.	02
(iii)	Traditional industries in New England Fish processing, Saw milling, Textiles Ship building, Iron ore processing, Printing and publishing.	02
(b)(i)	Describe the factors which led to: Decline of the traditional industries in New England. • Exhaustion of raw materials such as forests, and mineral resources like iron ore. the most affected were the forests which got overexploited • Most of the industrial workers at that time moved elsewhere to look for better paying jobs in other regions of USA • There was the challenge of competition from other industries in other areas making similar goods • The buildings of the old type industries and their machinery had become obsolete/outdated or too old and as a result they were abandoned • There were changes in fashions especially in terms of the textile and shoe making industries	06

	• Development of strong trade unions by workers such that the workers became aware of their rights hence they started demanding for better working conditions. There was now a problem of inadequate power to manage the modern industries. This made New England to be out competed.	
	Any 6 Described × 6 marks	
(ii)	Development of New industries in New England.	06
	• There was a need to develop new industries as the old ones were being faced out. This came as a result of industrial revolution	
	• There was positive government policy towards the development of industries as an important economic activity	
	• There were reliable sources of power such as hydro-electric power, coal, and others. This facilitated the running of machines in the industries	
	• There were large supply/reliable sources of important raw materials. These are in terms of agricultural raw materials like cotton imported from other regions of USA.fish for the fish processing industries, minerals for the mineral processing industries, wood from the forests, crude oil for the oil refining industries	
	• There are large tracts of land on which the industries have been developed a reason why there are many industries in many parts of New England	
	 The region has well developed transport network in terms of roads, railway lines air and water transport There is ready market/a large market base for the industrial goods from within USA and other parts of the world 	
	• There is large supply of skilled labor from the Americans and Europeans. The skilled labor is used in managing the technical work in the industrial centers	
	 There is readily available cheap labor from the immigrants entering North America from Europe There is a reliable supply of cheap water from the coastal areas and from the rivers. The water is very useful in industrial development. 	
	Description: 03 marks	
	Explanation : 03 marks	
	06 marks	
(c)	Explain the importance of industrial development to the New England (06 Marks)	06
	The industries provide a large source of employment to the people of New England	

	 The industrial workers are able to earn regular income from the jobs and this has helped in the improvement of their standards of living Industrial development has led to the growth of some towns for example Boston, New Bedford, Hartford, Holyoke, Burlington etc. Industrial development has facilitated the development of the transport network this is in terms of roads, railway lines which connect the major industrial centers From the exports of the manufactured good New England is able to earn huge sums of foreign exchange The government of New England is able to earn internal revenue by taxing the industries Industrial development has led to steady diversification of the economy in addition to agriculture, tourism, and mining Industrial development has led to the improvement of international relationship of New England with other countries especially those who import her industrial products The industries are able to manufacture consumer goods which are bought cheaply by the people of New England Some of the industries provide readily available market for the crops grown by the farmers thus promoting the agricultural sector The industries have led to the utilization of some of the natural resources like forests, minerals, fish and many others. Identification: 03 marks Explanation: 03 marks Explanation: 03 marks 	
(d)	State any two New industries which were established in New England • Textile, • Printing and publishing • Food processing • Ship Building • Soft drinks • Aerospace equipment • Wood processing • Metal fabrication Any 2 × 1 = 02 marks 25 marks	02



(ii)	State the characteristics of forests found in British Columbia.	04
	 Trees appear in pure stands i.e trees of the same type grow in the same area making exploitation easy. Most of the trees yield soft wood making them suitable to make soft boards, paper and pulp. The trees have a conical shape to enable snow fall off the trees. The trees grow tall and slender to over 30 metres. The trees are ever green due to the favorable climatic conditions like moisture throughout the year. The trees have needle shaped leaves to reduce transpiration (water loss) The trees have thick cones which protect the seed inside against the cold. The trees have a thick bark to resist against the cold winter temperature. The trees are light in weight and easy to transport. Trees have small branches which slant downwards enabling snow to slide off easily to avoid breaking the branches. Any 2 × 1 = 02 marks	
(c)	 Describe the factors that have favoured the growth of forests in British Columbia. The presence of cool temperate climate of cold temperatures up to 20℃ and adequate rainfall of 1000 mm p.a favors the growth of a variety of coniferous trees such as Douglas fir. The presence of relatively fertile soils support the growth of spruce, western hemlock, cedar and Douglas fir. The rugged landscape made of coastal ranges and the Rockies limit settlement and agriculture hence forestry is the only viable economic activity. The generally high altitude in British Columbia in the west of Canada limits settlement but favors the growth of coniferous forests on the rocky mountain. Existence of many rivers that are used to transport logs to the saw mills and factories e.g river Fraser, Mackenzie, Skeena, Gold river and Columbia. Presence of reliable power to run the saw mills generated from rivers Fraser and Columbia has led to development of timber processing at Vancouver. The numerous rivers supply unpolluted water for soaking and bleaching the pulp (paper) e.g river Fraser. The presence of variety of valuable tree species of commercial value such as spruce for pulp and paper, Douglas fir for building timber. The existence of large land in the northern region for growth of forests since British Columbia has a small population. 	08

	• The trees generally appear in pure stands of a single species i.e spruce or hemlock. This makes selection and cutting of trees very easy.	
	• During the winter, ground is frozen or covered by snow thus logs can be easily transported by dragging them on the slippery ground to the saw mills.	
	• Presence of advanced technology used to extract the trees e.g the use of tractors, chain saws, power driven saws have favoured forest exploitation faster.	
	• Presence of ready market for British Columbia's timber, pulp provided by the North eastern USA, Britain, Japan, and India.	
	• Presence of highly skilled labour working in the forestry industry of British Columbia to select, fell and chop trees into logs.	
	• Presence of large sums of capital to invest in purchasing logging machines such as tractors, steel towers, timber processing machinery.	
	• Presence of well-developed transport network by road, railway that link the East to West facilitates transportation of logs and timber products to processing factories in Vancouver, Ottawa, Quebec and Montreal.	
	• British Columbia is a politically stable province and this has favoured long term investments in the forestry industry involving setting up pulp and paper industries at Vancouver, New Westminster.	
	Description: 04 Marks Explanation: 04 Marks 08 Marks	
(d)	Outline the problems facing the forestry industry in British Columbia.	03
, ,	• Competition for market with other timber producing countries like Finland, Norway lowers market.	
	• Fire out breaks caused by careless smokers who throw away a smoldering cigarette end hence destroying many hectares for forests.	
	• Sometimes workers suffer from accidents during the felling of trees leading to injuries and death.	
	• Labour shortage due to sparse population in British Columbia.	
	• Lumbering on the steep slopes presents a lot of difficulty because roads are not easy to set up making transportation of logs difficult.	
	• Log jams created when transporting logs leading to delay when logs get stuck.	
	• Logging during the winter is difficult because the ground is frozen and roads are not operational.	
	• Depletion of the forests as the number of trees cut is very high compared to those planted.	
	$Any 3 \times 1 = 03 marks$	

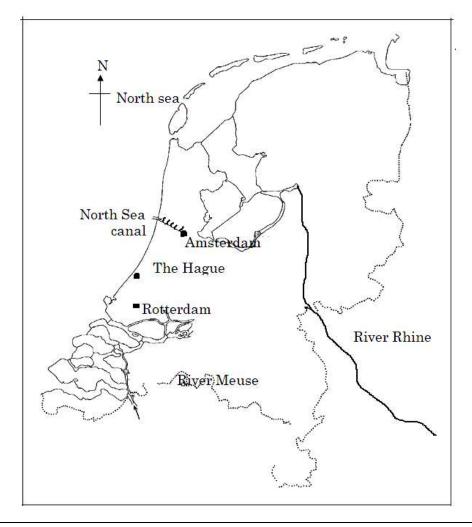
	REGION II: RHINELANDS	
(a)	. $Natural\ gas; \frac{13}{100}\times360^\circ=46.8^\circ$ $Oil; \frac{2.0}{100}\times360^\circ=7.2^\circ$ $Hep; \frac{3.5}{100}\times360^\circ=12.6^\circ$ $Nuclear; \frac{23.5}{100}\times360^\circ=84.6$ $Hard\ coal; \frac{50.0}{100}\times360^\circ=180^\circ$ $Others; \frac{8.0}{100}\times360^\circ=28.8^\circ$ A pie chart to showing the relative importance of energy production in Germany	
	Key Hard Coal William Nuclear Natural gas	
	Others HEP Oil	
(b)(i)	Identify the : largest,	01

	Hard Coal	
(ii)	Smallest amount in Germany Oil	01
(c)	Describe that factors that have favoured the development of the energy sector in Germany. (08 Marks) • The presence of high grade coal for energy generated for domestic and industrial use. • The availability well developed transport system by roads and railways for transporting coal to the industrial centres. • The growth of the banking and other financial institutions which provide money or capital invested in the energy sector. • The availability of skilled labour that is used in the extraction and processing of the various energy sources. • The availability of advanced technology used in extraction of coal and generation of HEP • Presence of large deposits of mineral ores such as coal that is used to generate power. • Wide spread industries that use the energy generated for example coal, solar and electricity. • Th spread of the industrial revolution from United Kingdom increased the number of energy sources in Germany. • The supportive government policy has attracted investments into the energy sector of Germany. • Description: 04 Max Explanation: 04 Max 08 Marks	
(d)(i)	Outline the: Environmental problems which have resulted from the energy production in Germany. (04 Marks) • Pollution of the environment through gases pumped into the atmosphere during the processing. • Exhaustion of some minerals e.g coal which resulted into closure of some industries. • Increased greenhouse gases emission into the atmosphere leading to rise in temperatures. • Deforestation during the process of mining coal leading to loss of bio diversity. • Accelerated soil erosion from the coal mines into water sources. • Contamination of the soils, ground water and surface water from the discharge of metals and other elements. Any 4 × 1 04 Marks	04
(ii)	Steps being taken to solve the problems identified in d) i) above (03 Marks) Steps being taken to solve the problems identified in d) i) above • Planting of trees to ensure soils are bound together. • Replacing disposable items with reusable. • Supporting environmental friendly practices. • Recycling of wastes to conserve natural resources. • Researching on green growth and sustainable development e.g green cities. • Phasing out the use of coal to generate electric power.	03

Signing the Climate Action law that targets cutting emissions by at least 65% by 2030.
Building better renewable heat act.
Support decarburization of energy intensive industries.
Prioritizing in environmental policies set on climate protection.

 $Any 3 \times 103 Marks$ 25 Marks

9 <u>A sketch map of Netherlands showing Ports; Hague, Amsterdam and Rotterdam, Rivers Rhine and Meuse</u> and the North Sea canal.



(b)	 Describe the physical factors which have led to the growth of Rotterdam into an international port. The location of the port as an entre-port to the countries served by River Rhine. The port is located in an area of deep water such that large ships can enter and leave the port easily. The relief of the area where the port is located is generally flat this made it easy for the construction of the transport network and buildings. The location of the port at the North Sea gives easy accessibility for many countries from different parts of the world. The port is not affected by winter freezing there for it is used throughout the year. The port is well sheltered from the sea waves and storms. I.e, it is a well sheltered harbor. It is located in a place of low tidal range i.e. the level of the water does not change such that ships can load and offload the goods easily. The port has a rich hinterland. Rotterdam serves the countries of Switzerland, Germany, Belgium, Luxembourg, and the Netherlands herself. The port is connected to many countries by the Rhine waterway. This makes the port easily accessible to the other Rhine lands countries. Identification: 04 Marks Expalnation: 04 Marks O8 Marks 	08
(c)	 Explain the problems facing Rotterdam port. As Rotterdam is one of the busiest ports in the world there is a problem of congestion on the harbor. There are problems of environmental pollution on the port. This is from the industries, oil spillage from ships and noise pollution. There is silting of river channels especially river Maas and the new water way. There is limited land for expansion. There is a problem of overcrowding due to many people in the city and port. There is a problem of shortage of housing for the big population and as a result slum development. There is high level of unemployment due to many people who come to the city/port. There are high costs of maintaining the port and port facilities. The problems of high crime rates which affect any city or town. There are problems of floods since the port is below sea level. 	07

	• There is a problem of poor visibility at the port during some season due to fog hence causing accidents for the ships using the port Any 7 Explained: 07 Marks	
(d)(i)	State any two:	02
	Exports,	
	• Vehicles, Textiles, Engines, Chemicals, Aircraft parts,	
	Watches, Flowers, Food stuffs	
(ii)	Imports handled by Rotterdam port.	02
	Petroleum, Coal, Iron ore, Tobacco Whent Main Coffee Sugar	
	 Wheat, Maize, Coffee, Sugar Tropical hard wood. 	
	TOTAL 25 MARKS	
	TOTAL 25 MARKS	
10(a)	Draw a bar graph to show Luxembourg's imports between 2003 and 2007	
(b)	State the year in which Luxembourg had:	01
	i) The lowest value,	
	- 2003 (10,942)	
	ii) The Highest export value.	01
	2007 (18,256)	
(c)	Describe the factors that have favoured the growth of manufacturing industries in	08
	Luxembourg.	
	• There are reliable sources of raw materials. This is in terms of mineral raw materials like iron ore, oil, and agricultural raw materials like grapes for the wine making industry. The iron ore is mined in the south-western parts of the country and more is imported from Sweden and France	
	• There is large land in the south which has been kept aside for the development of most of the industries.	

- There are reliable sources of power like HEP generated from the existing Rivers, coal, and oil.
- The political stability of Luxembourg has created a conducive environment for industrial development because it encourages foreign investors to come and invest their money without fear.
- Luxembourg has a well-developed transport network in terms of roads, railway lines air and water transport. There are many roads and railway lines which connect the industrial centers while the air and water transport connect Luxembourg to the rest of the world
- Luxembourg has a reliable supply of a highly skilled multi-lingual labor force from other European counties.
- There is positive government policy towards the development of industries as an important economic activity.
- There is a large market base for the manufactured industrial goods from within Luxembourg other European countries and the rest of the world.
- There is high level of technology used in most of the industries e.g. automated machines which make work easy and accurate.
- There is readily available cheap labor force provided by the people of Luxembourg and from the migrant workers from African countries.

Description: 04 Marks Explanation: 04 marks

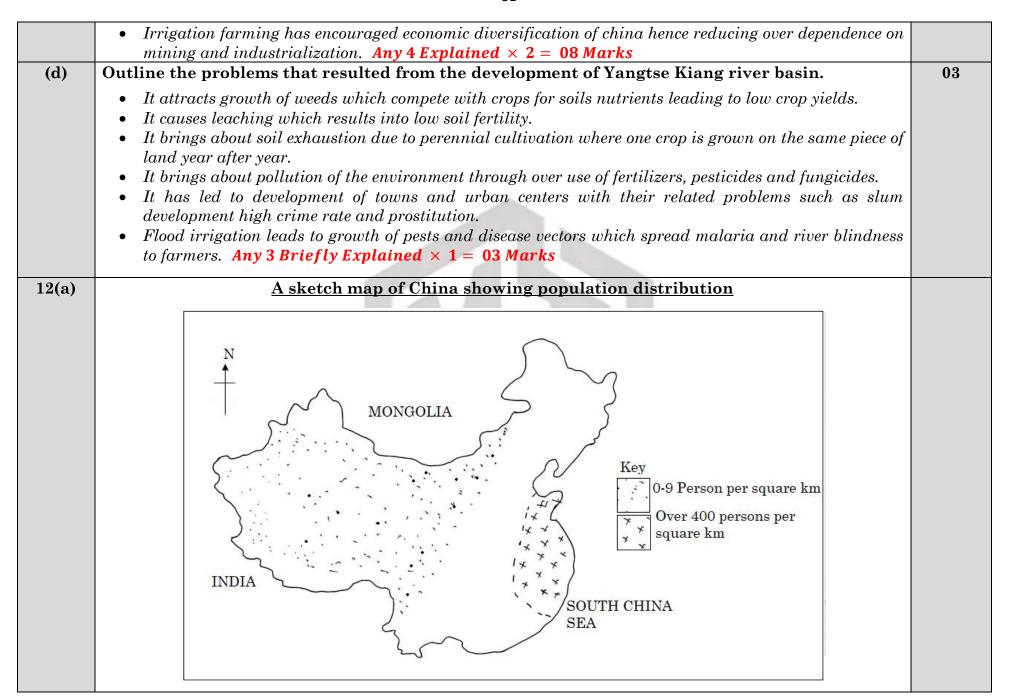
08 Marks

(d) Explain the benefits of manufacturing industries to the economy of Luxembourg.

- Form the exports of the industrial products, the government of Luxembourg is able to earn a lot of foreign exchange.
- Industrial development in Luxembourg has led to the growth of some town/urban centers .for example Luxembourg City, Mertert which is an industrial city as well as a port, Differdange, Esch, Grevenmacher etc.
- Industrial development has facilitated the development of other important infrastructure like the transport network. Today, there are roads, railway lines connecting the industrial centers to other parts of the country.
- The government of Luxembourg is able to earn internal revenue by taxing the industries
- Industrial development has created many employment opportunities for the people of Luxembourg.
- The agro-based industries provide an assured market for the agricultural products like Vines/Grapes, milk, beef. This encourages the farmers to continue investing in agriculture.

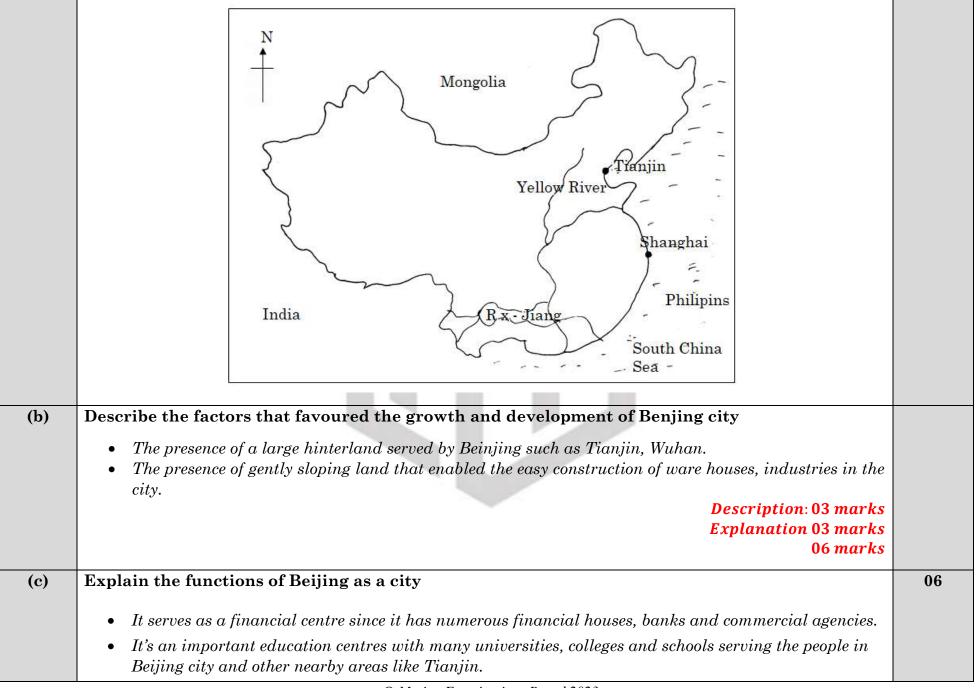
	• The industries in Luxembourg are able to produce consumer goods which are bought cheaply by the people.	
	• The industrial workers are able to earn some income from their employment and as a result their standards of living have improved.	
	 Industrial development has helped in the diversification of the economy of Luxembourg instead of depending on only agriculture. Through the export of industrial goods to other countries, Luxembourg has improved her international relationship with those countries who import her industrial goods. 	
	• Some of the industries are able to manufacture agricultural equipment, agricultural insecticides, and fertilizers thus boosting the agricultural sector.	
	Identification : 04 Marks Explantaion : 04 Marks : 08 Marks Total : 25 Marks	
	REGION III: CHINA	
11	Name the: i) Country: M,	01
	 Mongolia ii) Town: X , 	01
	 Beijing iii) Rivers: P and R, P is Mekong and R is Yangtze 	02
	iv) Island : Z.Taipei(Town) , Taiwan(Island)	01
(b)	Describe the steps taken by China to develop Yangtse Kiang river basin.	06
	 Introduction of new crops with commercial value such as sugar beet, to increase income sources for the farmers in the communes Establishment of agro-based and other light industries to diversify the income sources of the farmers. 	

	 Improving irrigation through the use of underground irrigation channels to encourage all year round production on the communes. Extension of credit facilities in form of bank loans to the farmers in order to improve their farming systems. Establishment of demonstration farms to train farmers on modern ways of crop cultivation and animal rearing to improve production on the communes. Changes in the land tenure system are being effected by offering some tracts of land to private individual farmers to grow their own crops for sale. Application of fertilizers and manure is done to improve soil fertility. Spraying crops with pesticides and insecticides to control pests and diseases Enforcement of strict laws against corruption to ensure effective management of the communes. Construction of dykes to control flooding in the river valleys. Practicing terracing and contour ploughing on the steep slopes to avoid soil erosion. Improving on the working conditions of the communes to encourage more farmers and improve on their living standards. Any 3 × 2 = 06 Marks	
(c)	 Explain the benefits of the Yangtze Kiang river basin to the people living in the surrounding areas. Farmers earn income through working on irrigation farms which helps them to improve their living standards. The government earns a lot revenue through taxing farmers and irrigation machinery which is used to develop the country. China earns a lot of foreign exchange through exportation of irrigated crops to Britain and USA which is used for development. Infrastructural development ranging from canals roads and railways, linking farmlands to market centers. Through irrigation, there is increase in cultivable land hence ensuring all year -round production. Promotion of international relations between china and the countries importing her irrigation crops hence widening market for china's products and allowing inflow of foreign aid. It has promoted industrial development especially agro-based industries that use farm produce hence creating more jobs to the people of china. There has been a reduction in the destruction effect of flood waters which is now used for irrigation. Irrigation farming has promoted urbanization along major canals and such towns include Beijing, Hangzhou, Soochou etc. with their advantages such as improved medical care and health. 	06



(b)	Describe the factors which are responsible for high population density in China.	08
	 The warm ice – free conditions at the coast brought by the warm Kuro-Siwo current attracted dense settlements. The high level of industrial developments attracted people for employment opportunities and trade. 	
	• The growth of urban centers on the eastern seaboard attracted many people because of the social amenities and provided.	
	 The rich alluvial soils on the North China plains support agriculture hence attracting dense settlements. The efficient transport and common systems by water, air and land increase accessibility attracting people to such areas. 	
	• Availability of various mineral resources stretching from Manchuria region to Shanghai area up to Nanting attracted people of work in the mines.	
	 Abundant freshwater sources such as rivers and lakes which attracted early dense settlements along these basins. The relatively flat landscape made it easy to settle on the construct infrastructure hence dense settlements. 	
	• The density concentrated areas also produce conducive subtropical climate with the warm conditions favoring settlement.	
	Any 4 × 2 described: 08 marks Explain the problems faced by people living in the densely populated areas of China.	
	 They have limited accommodation leading to the development of slums. There is congestion of people and vehicles (traffic jam) which leads to delays in delivery of goods and services. High levels of unemployment since the available jobs are not enough for the high population leading to 	
	 idleness and high crime rates This is too much pressure on land and other available socio- economic infrastructure leading to depletion of natural resources. 	
	 They suffer from food shortages leading to malnutrition and starvation. Flooding is experienced due to land degradation. 	
	• There are unhealthy environmental and sanitation conditions experienced leading to high spread of diseases.	
	 There is a lot of devegetation of the areas settled in leading to environmental degradation and deformation. The government spends a lot in providing of the areas settled in leading to environmental degradation and deformation. 	
	• The government spends a lot in providing the necessary social- economic services such as hospitals, roads, schools etc.	

	 High level of pollution arising from industrial productions to meet the demands of the big population. The government finds difficulty in planning and catering for the large population. High costs of living are experienced due to shortage of the necessary goods and services. 	
	Any 4 X 2 Explained = 08 Marks	
(d)	Outline the measures being taken by China to solve the problems identified in c) above.	04
	 Adopting of a population policy on family planning of one child per family policy. Modernizing agriculture to increase productivity and meet the food needs of the large population. Importing of food to supplement the domestic food reserves. Government policy of the green revolution aimed at increasing quality and quantity of food produced to ensure food security for the large population. Diversifying of economy to provide alternative employment such as farming, industrialization and mining. Establishing of health centers to help treat diseases. Establishing of planned settlements to curb down slum development. Constructing of sky scrapers to reduce on congestion and pressure on land. Encouraging outward migration from the densely populated areas to the sparsely populated areas. Using of fertisers to improve on the soil conditions in order to improve productivity. Putting in place education programs to teach about the dangers of high population 	
	$Any \ 4 \times 1 = 04 \ Marks$ $Total : 25 \ marks$	
13(a)	A sketch map of China showing Sea ports Shanghai and Tianjin, Rivers Yellow and Xi Juang and South China sea	06



	• It's a residential area accommodating a huge population offering residential estates and slums where many poor people of the city reside.	
	• It's political entre housing headquarters of international organizations.	
	• It's a cultural centre with many museums, art galleries and libraries It is also an industrial centre with both light and heavy industries.	
	$Any 3 \times 2 = 06 Marks$	
(d)(i)	Outline the: Problems facing Beijing city.	03
	 There is shortage of adequate and decent accommodation leading to poor housing and living conditions. Pollution from the many industries and cars disposing of waste products especially gases into the air, water and land. There is congestion in terms of housing as well as traffic during the rush hours leading to delays. There is high crime rates partly because of the large number of unemployed people living in Beijing. Unemployment is also high with many people migrating into the city with the hope of finding jobs. Limited space for the city expansion. Any 3 × 1 = 03 Marks	
(ii)	 Steps that can be taken to solve the problems above. Clearing and upgrading of the slums replacing them with modern housing estates at a cheaper rate for low income earners. Instituting laws requiring industries to treat their wastes before disposing it. Reinforcing the police department and intelligence organizations to curb down high crime rates in the city. Efforts be made to increase employment opportunities through the provision of more industries. Constructing very tall buildings called skyscrapers with more 100 floors to solve land shortages. Any 3 × 1 = 03 Marks Following The Tense Used 	03
	THE END	