TRANSPORT AND COMMUNICATION

MARKING SCHEME

1993 QUESTION 3 (b, c & d)

- (b) Apart from transportation, list four economic uses of rivers in Africa Fishing
 - Providing water for irrigation
 - Providing water for domestic use
 - Providing water for industrial use
 - Hydro-electric power production
 - Source of sand for building
 - Source of alluvial soils for agriculture
 - Source of sand for building
 - Tourist attraction especially waterfalls
 - Source of minerals
- (c) Explain five factors that have hindered the development of river transport in Africa.
 - Many rivers in Africa pass through different climatic regions with alternating wet and dry seasons rivers are seasonal. This makes the water volume to change from season to season, making it difficult for vessels to sail.
 - Presence of rapids and waterfalls which hinders the vessels
 - Many rivers in Africa are either short, too shallow/too swift/narrow. This makes it difficult for vessels to move on them.
 - Presence of floating vegetation/sudd makes it difficult for vessels to sail on a river.
 Some areas have dense vegetation along the riverbanks. This makes the river narrow, hindering the movement of vessels
 - Silting at the river mouths hinders development
 - African countries have inadequate capital to be used in the development of waterways, ports and purchasing of vessels.
 - Many rivers in Africa flow across political boundaries, for such rivers to be used for transportation, the countries involved have to negotiate with one another. This hinders
 - development of river transport
 - Inadequate technology hinders the process of developing river transport
 - Most of the rivers in Africa pass through unproductive areas hence it is uneconomical to develop the rivers
- (d) Explain why road transport in Africa is better developed than railway transport
 - Roads are more flexible than railways as they can be constructed from door to door
 - Compared to railways, which are built on specific gauges, roads can be of different grades that ranging from loose surface to tarmacked/many different types of vehicles
 - use the roads.
 - Roads are cheaper to construct as compared to railways which require iron and steel for construction
 - Roads carry small quality of loads. This promoted small-scale business as posed to railways, which carry bulky goods. This factor calls for the construction of more roads than railways
 - Roads are faster means of transport as compare to railways in Africa

 Skills of road construction are less involving compared to railways where gages are constructed

1996 Q 1c, d (Sect B)

- Africa countries were administered by different colonial government who constructed rail lines only with the areas of their jurisdiction.
- Many African countries have political differences, which lead to mistrust and hostility. This works against any efforts undertaken railway construction jointly.
- African countries have railways of different gauges, which makes it difficult for them to be connected.
- There is little inter- state trade among African countries. This does not warrant construction of railways to transport bulky goods.
- African countries lack sufficient capital to establish railways which rely mainly of imported raw materials / mountains landscape / swampy terrain have hindered the development of rails to link the countries.
- Establishment of airport has created employment opportunities thus solving the problem of unemployment/improving the standards of the employees.
- It has promoted tourism by providing direct links with the countries of origin.
- It has promoted Horticultural products by providing efficient means of transport to the foreign markets.
- It helps generate revenue through taxation of goods and passengers at the airport./ foreign exchange earning.
- It has promoted international understanding by enabling Kenyans to interact with people from other part of the world.

- P- Cameroon
- Q- Zaire (Democratic Republic of Congo).
- There are civil wars in the region
- There are civil wars in the region
- Tariffs charged at the border posts increase transportation costs
- Parts of highway are incomplete/impassable during wet seasons/are similar goods
- Different currencies are used
- Long distance covered
- Language barrier
- There is competition from other forms of transport road pipeline which are faster and flexible/ sometimes cheaper
- Maintenance expansions costs of rail network in high thus some of the wagons used are old there has been little expansion of rails lines
- There has been mismanagement of rail services leading to deteriorating conditions and lower income
- Inadequate servicing of rail equipment wagons/lines has lead to frequent accidents derailments

- The government has provided the necessary infrastructure such as roads and telecommunication which make it possible for the business community to easily market their products
- The government facilities the organization of Trade Fairs/Exhibition/shows, to enable the business community to advertise their products
- Removal of restriction of movement of goods produce/fixing air market days
- Removal of price controls
- Imposition of tariffs on imported goods to produce locally manufactured
- The government facilities the organization of conferences/seminars, to enable the business community to exchange ideas on trade
- The government through KBS maintains the quality of goods that are produced and sold through Kenya Bureau of standards (KBs).
- The government provides credit facilities to the business community through institutions such as state banks
- The government facilitates easy distribution of goods through organization such as Kenya national corporation.(KNTC).
- There is likely to be improved transport links between Kenya and other two countries (Uganda and Tanzania), which will facilitate faster movement of goods and passengers.
- Trade in Kenya will likely to increase because expanded hinterland market / strong bargaining power.
- There is likely to be more tourists visiting Kenya as a result of opening of boarders
- There is likely to increase employment opportunities because of free movement of people
- Expanded market will attract foreign investment which will lead to expansion of industries.
- Exchange or research finding / training.

- Motor vehicles are cheaper to buy and maintain than crafts
- Road transport is more flexible than air transport/ road leads everywhere / carry people/ goods from one place to another
- Construction of roads is cheaper than that of airports
- Fares/ freight charges are lower than that of air transport
- Skills require to operate aircrafts are higher and rare than those required to operate motor vehicles.
- It encourages the growth of tourists industry
- It promotes horticultural industry. Perishable goods can be transported easily.
- It enables cultural exchange between Kenya and other countries
- It encourages international trade
- It promotes international cooperation/ facilitates emergency services
- It earns foreign exchange from industries

- Railways can carry more goods over long distances at once
- Railway are cheaper than roads
- Railways are less susceptible to traffic jams
- Once built, railways do not require frequent relaying unlike roads, which are frequently resurfaced
- Railways are more efficient because they operate on rigid timetable
- Railways are free to accidents
- X Nakuru
- Y Eldoret
- They are expensive to maintain
- They are not flexible
- They do not serve intermediate locations
- They can cause excessive loss in case of leakages
- A pipe can be used only for one type of oil product at a time.

- Lake Superior
- Niagara falls
- Quebec port
- It provides cheap mean of transport for both imports and exports, thus encouraging internal/international trade
- It has led to growth of ports and towns along its course. These have become focal points for various economic activities
- Due to accessibility to raw materials, there has been extensive industrial development in the area.
- The dams found along the route provide hydroelectric power for domestic and industrial use.
- The sea way is a tourists attraction which generates income in the region
- The sea way has created employment opportunities in the transport industry raising the standards of living of the people in the area
- Tarrifs charged earn the countries income
- African countries have railways of different gauges, which make it difficult for them to join
- The countries were colonized by different European powers who constructed railways to transport raw materials from the interior to the ports within their own colonies
- Political differences/ different political ideologies/ political instability among African countries hinder efforts to construct railway line to link them
- African countries produce similar goods hence there is limited trade between them. (this does not warrant construction of railway lines)
- Railways are expensive to construct/ most African countries are poor/ inadequate capital and hence expensive to construct/ expand
- Parts of Africa are unproductive so it would be uneconomical to construct railway lines

Variation in terrain has hindered the development of various lines

Any $4 \times 2 = 8 \text{ marks}$

- Liberalization of airways/ licensing of more private radio/ T.V stations
- Introduction of E- mail internet/ fax (telefax)
- Introduction of mobile phones/ cell phones/ pagers
- Liberalization of the press
- Expansion of telephone facilities
- Liberalization of postal services

Any $2 \times 1 = 2 \text{ marks}$

- Development of other and more efficient means of communication e.g. electronic mail has led to reduced use of telephones
- High cost of installation and maintenance of telephone lines limits the number of subscribers
- Vandalism of telephone equipment renders most telephone services would be unavailable to users
- Mismanagement in the organization that provides telephone services has made it difficult to expand the services to many areas of the country
- Poor reception/ disruption of natural hazards/ overlapping of telephone lines discourages the use of the facility.
- Lack of modernization of telephones in some areas causes delay and discourages the use of telephone
 Any 3 x 2 = 6 marks)

2004 Q 7a,b

- P- Kasese
- Q Butere
- R Kigoma
- S- Maize / wheat/ Cattle/ / Coffee/ Passengers Any 1 x 1 = 1 mark
- T- Soda Ash
- U- Tanga (1 mark)
- V- Malawi/ Nyasa (1 mark)

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- It is cheaper to construct/ Maintain
- Roads are flexible/ provide door to door services
- Roads can be used by a wide range of transport agents/ they are more Versatile
- The roads are faster to use
- There is greater demand for road transport than railway transport

Any $4 \times 1 = 4 \text{ marks}$

- Narrow roads where heavy traffic limit ease of movement and overtaking the Pot- holed sections of the roads may cause tyre burst/ vehicle breakdowns/ may make drivers who are avoiding potholes crash the vehicles
- The sharp beds may cause vehicles to veer off the roads/ stiff grade may make drivers to lose control of vehicles
- The narrow bridges may cause vehicle to crash
- Sub- standard surfaces may cause vehicles to skid/ overturn
- Blurred/ missing road signs may make drivers lose control of vehicles
- Unavailability of pedestrian paths/ sidewalks may cause pedestrians to walk on the road.

- Dusty roads may reduce visibility leading to accidents
- Muddy roads during the rainy season may cause vehicles to collide
 Any 4 x1 4 marks)

- Differentiate between transport and communication
- Transport is the movement of goods and people from one place to another while communication is the transmission of ideas of information from one person to another.
 (2 marks)
- State the causes of the decline in the use of letter writing as a means of communication in Kenya
- The high rate cost of postage
- Competition from cheaper and faster means of communication
- The delay in the delivery of letters
- Loss of letters
- Tampering with letters

(Any $3 \times 1 = 3 \text{ marks}$)

2007 Q 4

- P- Quebec
- Q -New York State Barge Canal. Erie Canal
- B Lake Ontario
- It has increased (internal and external) trade
- It has facilitated the transportation of bulky products
- It has reduced the cost of transportation of bulky products
- The dams along the sea way provide HEP for industrial use
- It has led to the development of lake ports and towns which provide market / labour / housing facilities.

- Nairobi Jomo Kenyatta Airport
- Mombasa Moi International Airport
- Eldoret International Airport
- Air transport is faster/ quicker response in case of emergency
- It is more efficient transporting perishable goods/ valuables / high value goods
- It experiences less traffic congestions
- Helicopters can land in remote areas
- Planes can be used for activities like spraying of farms
- There are fewer accidents in air/ more safer
- It is more comfortable
- Construction of bypasses/ sub ways/ tunnel/ flyovers/ under passes to reduce congestion of the large towns

- Construction of highways/ dual carriages road expansion to accommodate more traffic/ improve traffic flow
- Repair/ maintain the roads in goods state to reduce accidents/ improve traffic flow
- Educate road users on road safety precautions/ discipline on roads to ease traffic on roads/ reduce road accidents
- Control the amount of load carried by large lorries/ trucks to reduce damage on road surface
- Enforce traffic rules to regulate traffic flow/ reduce road accidents
- Provide paths for cyclists / pedestrians to reduce congestion on roads/ improve road safety
- Most of the existing rail lines were constructed by the colonialists who had no interests in linking the colonies
- The rail lines are of different gauges making it difficult for the countries too link them
- Political differences/political instability discourages attempts to link the lines
- Inadequate capital limits the construction of new lines/ maintenance of railways
- Large areas of the continents are economically unproductive thus it would be uneconomical to link railways
- Difficult terrain/ thick forests makes it expensive to construct rail line
- Limited trade links of production of similar commodities makes it unjustifiable to construct railway lines
- Competition from/ prevalence of other means of transport lead to neglect of railway transport.
- Some rivers have rapid/ waterfalls/ cataracts
- Some rivers have seasonal regimes/ varying volumes
- Some rivers have shallow water/ sited five mouths
- Some have floating vegetation that choke the course
- Some rivers have narrow channels unsuitable for sailing vessels
- Some are short
- Inadequate capital to develop waterways/ purchase vessels to develop ports

- The Trans Africa Highway to Mombasa
- The Great North Read/Cairo for Gaborone (Cape town)
- The Trans-Saharan Highway/Algiers to Lagos
- Tripoli to Windhoek (Cape town)
- Cairo to Dakar (Any 2 x 1 = 2 marks)
- In some of the countries between the two parts, there are alternative modes such as railway and water which are cheaper than road transport.
- Some of the countries have not developed proper road links with their neighbours due to political differences/neglected maintenance of highways thick forests.

- Most parts of the route have difficult terrain/making movement of heavy commercial vehicles difficult/construction of roads expensive/difficult/internal/external conflicts.
- There is insecurity along some parts of the road between the two ports.
- The bulky goods that may be transported between the two ports may be costly to transport by road. (any 3 x 1 = 3 marks)

(a)

- (a) (i) Rivers
 - Lakes
 - Canals

(ii)

- To reduce the congestion on our roads
- To reduce road accidents by tankers
- To reduce congestion of oil terminus
- Pipeline transport is more reliable convenient than road
- To reduce contamination loss of the oil products while being transported
- To reduce damage of roads by tankers

(b) (i)

- It is used to carry heavy bulk goods/large carrying capacity
- It is mo reliable / efficient due to fixed schedules / less traffic jams
- Railways are narrow thus economical in terms of land space.
- Train are less prone to accidents
- It is a cheap mode of transport / low maintenance cost
- Electric trains are cheap
- It conveniently transport a wide variety of goods

(ii)

- Some roads have potholes/uneven road surfaces
- Some roads are steep
- Some roads are slippery
- Some roads are unmarked/absence of road signs
- Some roads have loose surface
- Some roads have sharp bends
- Some roads are dusty
- Some roads are narrow
- (c) (i) M Duluth
 - P Buffalo
 - (ii) N-lake Huron

(d)

- They have encouraged trade in both countries by providing cheap means of transport
- The dams constructed along the route provide hydroelectric power for industrial use

- They have led to growth of ports to towns along the route which are focal points for various economic activities
- They have created employment opportunities in transport industry thus raising the standard of living of the people in the area
- They are tourist attractions hence generate income for the countries
- They are sources of water for domestic/industrial use
- The countries earn revenue from toll charges levied on ships that use the routes