

21. TRANSPORT AND COMMUNICATION

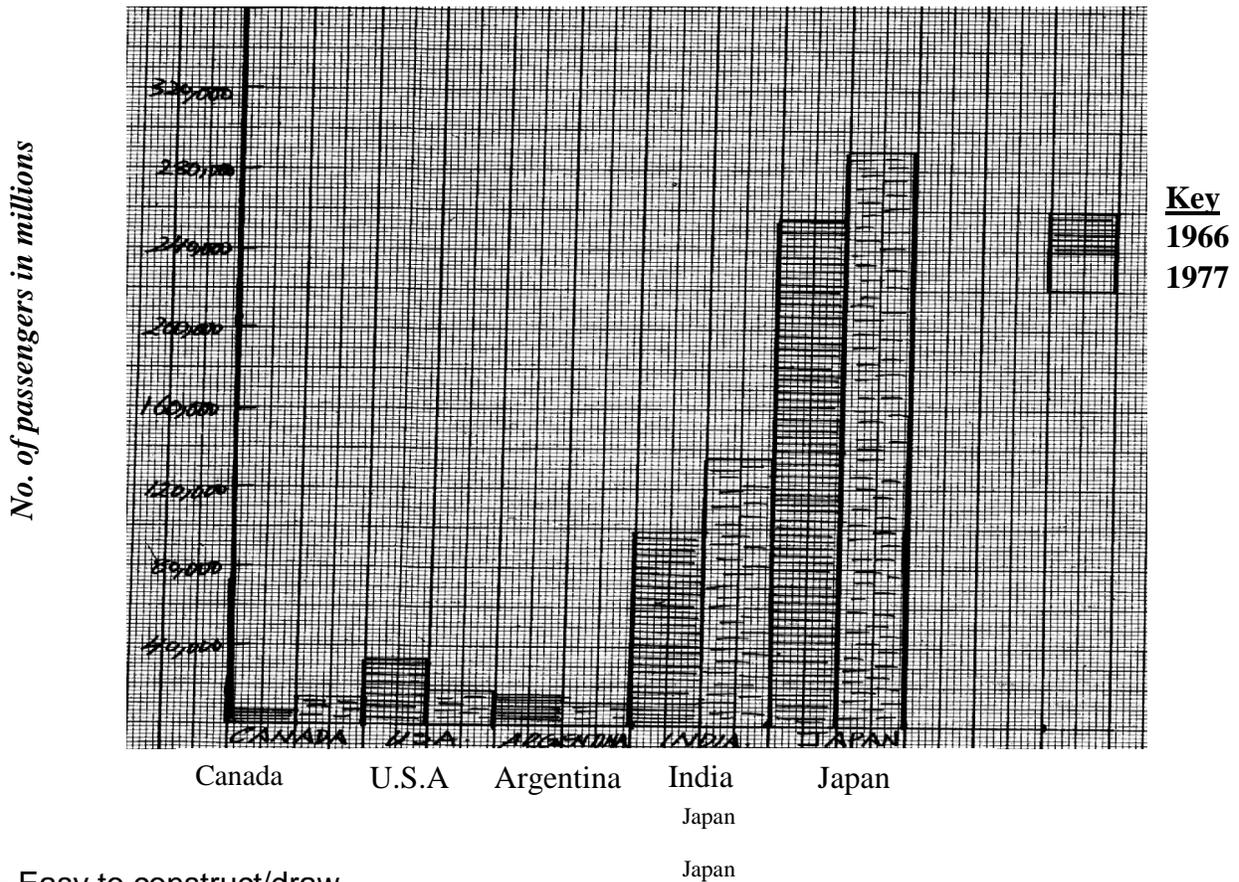
1. a i) – Demand
 - Availability of infrastructure
 - Topography/ terrain
 - Capital availability
 - Political factor
 - Historical factors
 - Climate
- ii) – Difficult terrain – This makes it difficult to develop transport and communication
i.e the great rift valley, the rugged scarps inselberg and numerous rocks out crops
 - Harsh environments – e.g. Sahara desert and many isolated others
 - The harsh desert climate associated with low population. Such makes it uneconomical to construct the transport and communication facilities
 - Non – navigable rivers

This is due to

 1. Fluctuating water levels
 2. Presence of rock outcrops
 3. Rugged terrain i.e. many rivers have rapids waterfalls
- (b) i) A – L. Michigan
B – L. Huron
C – L. Erie
- ii) - To provide cheap water transport for bulky commodities like coal and iron ore to industrial centres around the great lakes
 - To shorten the route to external markets especially for wheat from Canadian prairies and manufactured goods from the Great lakes
 - To expand manufacturing industries along the entire route, provide employment and develop towns
 - Increase agricultural production and tourism
 - Open up this part of America for international trade
 - To ease strain on American railways
 - To increase HEP production along parts of the Seaway e.g. at Niagra waterfall and at dams constructed along the route
- iii) – The long sault and Lachine rapids between Ontario and Montreal hindered navigation. Waterfalls e.g. Niagra was preserved for HEP and tourist attraction. This was solved by construction of alternative route i.e. Welland canal
 - Shallow ports e.g. Montreal that could not handle large ships – they were dredged and deepened
 - Problems of trans- shipment along the seaway causing delay. Seaway has been widened to accommodate large ships and these can now sail through the water way without stopping
- c) - Reduces deterioration of Nairobi – Mombassa highway due to reduction of tankers
 - Has reduced cases of accidents especially on Nairobi – Mombasa highway
 - Very fast and convenient means of transporting such highly risky products since the products are firmly sealed in the pipe
 - Less labour used after installations i.e. cuts down on labour costs
 - It cuts down on occurrences of fuel spillage and pollution caused by derailment or accidents on trail or roads
 - Different kinds of petroleum products for various industrial and domestic uses can be conveyed one pipeline
 - Ensures constant supply of petroleum
- d) - It has promoted international cooperation created by no distance
 - has led to expansion of trade for aircraft goods especially those with perishable goods to international market without delay

- Mismanagement
- Poor reception /overlapping of telephone line.
- 3. c) - High competition from faster and more efficient electronic mail.
- High cost of installation.
- Vandalism of telephone equipment.
- Mismanagement
- Poor reception /overlapping of telephone line.
- 4. a) - Trade would grow and develop in Kenya
 - There will be more diplomatic ties with rest of East African states.
 - More Kenyans will get employment in other East African countries
 - Kenya would earn more revenue paid by the users from East African states
- b) - Inadequate road signs make the drivers to cause accidents
- Slippery roads lead to accidents
- pot-holed roads surface cause vehicles to breakdown
- Traffic jams, especially in urban centres cause delays
- Narrow roads/bridges makes the drivers to strain and cause accidents
- Inadequate drainage system of roads especially in towns cause accidents
- 5. a i) – Road
- Railway
- 5. a ii) - Fluctuations/ interruptions e.g. freezing
- Obstacles – usually unseen
- Limited network
- In case of accident losses are certain and enormous
- Relatively slow
- Expensive – ports/ harbours/ facilities
- May be in uneconomical areas
- Contribute to water pollution
- b) - Influence of choice of location of economic activities – moving of raw materials/ finished Products
 - Expands markets size – possible to move goods and transfer information
 - Employment creation – reduce unemployment/ improve living standards
 - Information/ movement hence tourism hence forex
 - Revenue through tax – development
 - Dissemination of information brings about change
 - Leads to urbanization
- . c) - Creation of trans Africa high ways to increase connectivity
- Creation of international railways to increase connectivity
- Regional economic integration to increase trade hence the need for networks
- Establishment of national networks and transport/ communication companies to increase local transport/ communication
- d i) - It is an artificial water way
- ii) - Suez
- Panama

6. a i)



- ii) - Easy to construct/draw
 - Easy to compare
 - Easy to read
 - Give clear visual impression
 - Depict data more accurately

6. b) $\frac{6000-4800}{4800} = \frac{1200 \times 100}{4800}$
 $= 25\%$

6. c) - 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 difference /different political ideology /political stability among African countries hinder efforts to construct railway line to link them
 - African countries produce similar goods hence there is limited trade between them and this does not warrant them to construct railway lines
 - Railways are expensive to construct/inadequate capital and hence expensive to construct
 - Parts of Africa are unproductive so it would be uneconomical to construct railway lines
 - Variation in terrain has hindered the development of various lines

6. d) - narrow roads where heavy traffic limit ease of movement and overtaking
 - the pot-holes sections of the roads may cause tyre burst/vehicle breakdown /may make drivers who are avoiding potholes crash vehicles
 - The narrow bridges may cause vehicles to crash
 - Sub-standard surface may cause vehicles to skid/overturn
 - Dusty roads may reduce visibility leading to accidents
 - 4 - muddy roads during rainy seasons may cause vehicles to collide

7. a i) - News papers and magazines
 - Radio and television
 - Telephone/mobile phones

- Internet
 - Carrier service
 - ii) - Provide a reliable continuous flow of the commodity being transported
 - It is relatively cheap/inexpensive to operate
 - It is a safe mode of transporting oil, gas and water
 - Are free from accidents/accidents are minimal
 - It does not pollute the environment unless there's a leakage
 - bi) - Airports are very expensive to build
 - Buying and maintaining the aircraft is a very expensive venture
 - In case of accidents there are usually few survivors and the losses are very high
 - It is very expensive to travel by air
 - The transport of bulky goods on planes tedious is and expensive
 - The government requires a lot of land to put up airports
 - The cost of insuring plane is very high
 - Running airlines requires skills and personnel
 - ii) - Creation of employment opportunities as they are industries. This leads to raising the standard of living of the people.
 - Promotes international and domestic tourism hence earns foreign exchange to the countries concerned
 - Expansion of new trade areas and markets hence boosts industrial, commercial and agricultural activities hence development
 - Leads to increased mobility of labour thus reducing cases of labour shortages in industries and other sectors
 - It has promoted international understanding as people are able to interact and learn about each other
 - It generates income for the government and the people of the country. The income earned boosts the economic development of the country
 - Growth and development of different settlements is influenced by the availability of transport networks. As towns develop other facilities expand hence economic development
 - c i) - To regulate the difference water levels along the sea way through dredging
 - To smoothen the river channels by removing the existing rock outcrops, rapids and small
 - To regulate the flow of St. Lawrence River through the construction of dams and locks
 - To promote trade and industrialization in the two countries
 - To remove the silt that was brought about by depositing between lakes Erie and Huron
 - ii) - Soo canals
 - Welland canal
 - Trent canal
 - New York state barge canal
- 8.
- a i) (i) Lake marked P – L. Erie
 - ii) River marked Q – Detroit river.
 - iii) Canal marked R – Soo Canal
 - iv) Part marked S – Duluth.
 - b) - Provides easy means of transport for both imports and exports, thus encouraging internal and external trade.
 - It has led to growth of parts and towns along its course.
 - Due to accessibility of raw materials, there has been industrial development in the area.
 - The dams along the route provide hydro-electric power for industrial and domestic use.
 - The sea way is a tourist attraction which generates income in the region.
 - The sea way has created employment opportunities in the transport and industrial sector raising the standards of living of the people in the area.
 - Tariffs charged earns the country incomes.

- c) - Most rivers in Africa pass through different climatic regions with alternating wet and dry seasons. This makes the volume of water fluctuate from season to season making it difficult to use the rivers.
 - Many rivers in Africa have rapids and water falls which hinder the movements of vessels.
 - Some rivers in Africa have floating vegetation that makes it difficult for vessels to move through them.
 - Many rivers in Africa are either short, too shallow or too swift making navigation on them difficult.
 - Rivers are affected by siltation at their mouths and along their courses. This reduces its depth required for the vessels to move.
 - African countries have insufficient capital to use in the development of water ways, ports and for purchasing vessels.
 - African countries have inadequate technology. This hinders the process of developing river transport.
 - Some rivers in Africa flow across different countries. This calls for negotiation between countries concerned. This hinders the development of river transport.
 - Most of the rivers pass through unproductive areas making it uneconomical to develop
- d i) - Liberalization of airwaves/licensing of more private radio stations (T.V. stations).
 - Introduction of E- mail /internet/ Fax. e.t.c
 - Introduction of mobile phones/cell phones/pagers.
 - Expansion of telecommunication facilities to new areas.
 - Liberalization of postal services.
- ii) -Development of other faster and more efficient means of communication e.g. electronic mail has led to reduces use of telephones.
 - High costs of installation and maintenance of telephone lines limit the number of the subscribers.
 - Vandalism of the telephone equipment renders most of the telephone services unavailable to would be 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/overlapping of the telephone lines limit the use of the facility/description by natural hazards.
 - Lack of modernization of telephone in some areas causes delay and discourages the use of telephones.
- 9. (a) Is the parking of goods in large standardized box – like structure which once filled in a factory /exporter can be transported
 - b) - Saves space in ships as their dimension is more or less uniform.
 - It speeds up the process of handling goods hence saves time.
 - It is relatively cheap as it requires little labour.\reduce loss of goods as they are sealed at the exporter premises and delivered to the importer without the seal being broken.
 - Reduces loss of goods through breakages and spoilage.
 - Checking of goods is fairly easy.
- 10. (a) (i) - Facilitates faster business transactions due to fast means of transport hence increasing volume of trade
 - Through M- Pesa and M- Kesho it has facilitated money transfer for business hence increasing trade transactions and investment
 - It has created employment which improves the living standards of the people
 - The company pays taxes which are used to improve other sectors of the economy
- ii) - Facilitates theft cases/ aids stealing
 - It is expensive to acquire the device and to maintain it
 - Health associated risks e.g. hearing impairment and cancer
 - Can easily be lost

- Lack of network coverage in some areas
- Noise pollution over ringing
- b) - Most rivers are seasonal
- Many major rivers are unnavigable due to presence of water weeds, cataracts and water falls
- Meanders on some rivers make the distance longer than land routes
- Many rivers flow through empty or inhospitable lands with little economic value
- Siltation especially near the river mouth makes the channels shallow
- c) - Construction of super high ways where by each country is responsible for construction of the stretch within her national boundaries to improve linkage of countries
- Establishment of regional trade blocs that spearhead the development and management of transport network among member states ensures good transport network in Africa
- Negotiations among leaders of various African nations to provide security to avoid high way robbery