

ANSWERS TO DEVELOPMENT OF TRANSPORT AND COMMUNICATION

1. Identify two ways in which the invention of the wheel promoted early transport.

- (i) Eased transportation of heavy loads
- (ii) Facilitated speedy transportation of people and goods
- (iii) Enhanced movement of soldiers during battles led to development of roads
- (iv) Facilitated transportation of goods over long distances.
- (v) Made travelling more comfortable

2 x 1 = 2 marks

2. Identify one advantage of drum beating as a form of communication over the use of smoke signals in Africa during the pre-colonial period.

- (i) Drum beating could be used any time day or night, smoke signals can only be used during the day.
- (ii) Drum beats relayed specific messages while smoke relayed general messages.
- (iii) Drum beats can be heard even if one is not on the look out. Smoke signals one must be on the look out to see it.
- (iv) Drum beats spread messages faster than smoke.
- (v) Drum beats can be used during all seasons while smoke can not be used during all seasons e.g. can't be used during cloudy or misty weather.

Any 1 x 1 = 1 mark

3. What was the contribution of Alexander Graham Bell in communication?

- He invented the telephone 1 x 1 = 1 mark

4. a) Mention three early written forms of communication.

- (i) Pictures
- (ii) Stone tablets/clay tablets
- (iii) Parchments
- (iv) Scrolls

Any 3 x 1 = 3 marks

b) Discuss ways through which the modern society has benefited from the development in telecommunication.

- (i) It has facilitated commercial transactions between countries & individuals. Through use of fax and telephone.
- (ii) Provide employment

- (iii) Promote space research through satellite communication
- (iv) It is used in modern warfare to provide information to the parties involved in the war.
- (v) Education – telecom serves as medium for public education.
- (vi) Mass entertainment e.g. through T.V radio, Cinema etc.
- (vii) Has helped to improve travel by air & water
- (viii) National unity and patriotism i.e.
- (ix) Has promoted fast transmission of ideas
- (x) Facilitated storage of information through use of computer.
- (xi) Has enabled organisations and individuals access information at their own convenience.

Any 6 x 2 = 12 marks

5. They were straight

- They were raised above the ground
- They were well drained
- They were all weather roads. 2 points x1 = 2mks

6. Revolution in communication has reduced distance between different parts of the world hence increasing interaction between people. 1x1 = 1mk

7. Two vehicle without – wheels that were among the earliest to be developed by man

- Travois
- The sledge / sleigh
- Portage / Sedan chair 1 x 2 = 2 Marks

8. a. Three results of the invention of the wheel in Mesopotamia

- Increased volume of Goods transported
- Made transport easier
- Enable building of war chariots
- Improved pottery 1 x 3 = 3

b. Six disadvantages of modern forms of communication

- Promotion of international crime e.g. fraud, drug trafficking
- increased terrorism because of easy and speedy communication
- Cause noise pollution e.g. radio, television
- Some telecommunication devices are expensive to buy
- Can enable transition of pornographic materials
- Led to destructive warfare e.g. though use of military satellite to direct missiles
- Cultural erosion as a few countries dominate it hence it's easy to influence their ideas in the world

2 x 6 = 12 Marks

9. - It has improved speed with which traders move

- It has facilitated fast marketing of goods and strategies by organizations and individuals
- It has improved transportation of urgent documents and messages relating to trade
- It has enabled fast transportation of perishable goods.
- Selling of air crafts is earning some countries a lot of revenue hence promoting trade

(Any 2 points, 2 x 1 =2mks), 2 x 1 = 2mks)

10. a) - Roads are flexible – they are found in many places

- Roads are cheap to construct
- Motor vehicles, motorcycles and bicycles are cheap means of transport
- Road transport links other means of transport
- Road transport can offer door to door services **(any 5 x 1 = 5mks)**

b) - Improved communication – There is good communication between countries, governments and citizens among individuals

contributed to the development of popular arts

widely used in many countries

- Transport – Ships at sea and aeroplane in the air are kept constant touch through telecommunication gadgets

back about the outer space

the enemy.

- Development of trade – It has helped to make quick business transactions

throughout the world and also advertisement of goods.

- National Unity – Using the radio to inform people about government policies. It helps in administration.

- It has helped in management through the use of computers to store and retrieve information

- Improved science and technology through scientific research on new gadgets.

(any 5 points well explained x 2 = 10mks)

**11. State two disadvantage of using the railway line as a modern means of transport.
(2 mks)**

- Locomotives are very expensive to buy.

- Rails need a lot of money to construct.

- Cannot give door to door services.

- Not economical over short distances.

- Only good for large amount or bulky goods. (2 x 1 2 mks)

**12. State two of the earliest forms of communication.
(2 mks)**

- Drum beats

- Messengers

- Horn blowing

- Fire and smoke

13. . Limitations of animal transport

-Slow and time consuming

-Limited to short distance

-Carry limited load

-Their movement is limited to day time

-Some animals like donkey are stubborn when they are tired / over loaded.

2x1=2mks

14. a) State five limitations of railway as a means of modern transport

-They are expensive to construct. The wagons are also expensive to buy and maintain

-They are less flexible because they only pass through certain landscape

-They are slow compared to other means of transport

-They are not self-sufficient and has be supplemented with road transport

-Although accidents are rare, they are fatal when they occur

-Emit a lot of smoke causing environment pollution 5x1=5mks

b) Explain five ways through which the modern society has benefited from the development of telecommunication

-It has eased and fastens communication between people and increased interaction and understanding

-It has enhanced information management by improving the storage and processing of information e.g. with use of computers

-They provide mass entertainment through transmission of music, films sports etc by the radio and television

-Promote water and air transport through the use of telecommunication devices to send signals to guide captain and pilots

-Promote and ease business transactions reducing cost and enabling quick transactions through the use of fax machines, computers and mobile phone / improve economic development.

-Enable people, to access information and programmes at their convenience

-Provide employment opportunities to many people

-Ease accessibility to remote areas through use of cell phones

-Improvement in security systems by use of radio calls and cell phone to combat crime and use of telecommunication devices to provide accurate and reliable information

-Promoted space exploration through research with the use of satellite communication .
5x2 =10mks

15. Give the greatest contribution of Alexander Graham Bell in the field of communication (1mk)

Invented the telephone

1 x 1 = 1mk

16. Give two ways in which telecommunication has facilitated modern trade. (2mks)

- i) Through advertisement
- ii) Buyers and sellers can communicate easily / faster.
- iii) Through improved travel e.g air , water 1 x 2 = 2mks

17. State two limitations of canal transport (2mks)

- i) Very expensive to construct and maintain
 - ii) Needs constant dredging / cleaning
 - iii) Not suitable where the bedrock is permeable
 - iv) Requires heavy traffic to justify its construction
- Any 2x1 = 2marks

18. i) Natural environment in space is hostile

- ii) Extreme temperatures / extreme light and darkness
- iii) Deadly hazards e.g. solar and cosmic radiation that can puncture the space crafts. (Any 2x 1 =2mks)

19. Samwel Morse. (1 x1 = 1mk)

20. – It was calm hence would be heard at far distances. 1x1=1mk

21. Dug deep trenches filled with heavy stones.

- Were raised above land on each side.
 - Deep trenches on either side of the road to drain water.
- 2x1=2mks

22. Improvement to macadamized roads

- (i) They are wider.
- (ii) They are dual carriage ways.
- (iii) Have fly-overs.
- (iv) Have under ground tunnels.
- (v) Have been straightened.
- (vi) Have motor ways. (2mks).
- (vii) Have modern traffic lights and road signs. (2x1=2mks).

23. Identify two uses of the wheel among the Sumerians. (2mks)

- ❖ *Wheels were fixed on the carts which were pushed by animals and people*
- ❖ *The wheels were used as war chariots*
- ❖ *The wheel was used to make pots*
- ❖ *It was used on shadoof*

2 x 1 = 2mks

24. Who revolutionised railway transport in the world. (1 mk)

- George Stephenson. (1 x1)

25. Mention two negative impact of telecommunication in the modern world. (2 mks)

- noise pollution
- Transmission of pornographic materials/moral decay.
- Promotion of international crime/terrorism
- Erosion of cultural values.
- Violence in schools due to violent programmes.

2 x 1 = 2mks

26. Two advantages of cinemas

- Gives better understanding
 - Everything comes live
- 2 x 1 = 2mk

27. Two results of space exploration

- Led to production of complicated weapons
 - promoted scientific research
 - -led to better understanding of the universe
- 2 x 1 = 2

28. a) Three advantages of motorcycle as modern means of transportation

- Cheap compared to charges by other means
 - Reliable and convenient
 - Fast as compared to bicycle.
- Any 3x1 = 3 mks

b) Six effects of the modern forms of transport

- Modern transport systems have facilitated the faster movement of goods and people
- Transport systems have enhanced social developments such as schools and hospitals.
- Population migration and settlement all over the world have been encouraged.
- A sound transport network enhances political control in a nation.
- Availability of good transport network led to colonization of Africa.
- Fatal accidents have resulted due to the development of air transport.
- Modern transport system has enhanced the exploitation of natural resources.
- Tourism a major foreign exchange earner has been promoted.
- Expansion of the transport system has led to the creation of employment opportunities.

- Growth of towns/urban centres.
- Led to enhanced agricultural development.
- Local and international trade improved.
- Industrial revolution is as a result of good transport systems.
- Countries in the world earn a lot of revenue due to charges on licenses, oil and fuel levies.
- Exchange of new ideas, science, religion, culture has been promoted.

Any 6x2 = 12 mks

29. a) - Faster than roads due to jams

- Cheaper than road
- Carry bulky goods
- Economy of space/shared traffic
- Fewer accidents compared to roads
- Less pollution

(Any 3 x 1=3mks)

30. i) Led to increased use of coal

ii) Expansion of international trade

iii) Increased use of water transport

iv) Led to improvement in water transport (2 x 1 = 2mks)

31. **Give one challenge facing space exploration (1mk)**

- Natural environment space is unsuitable for human life
- Very expensive
- Space crafts are prone to accidents e.g. solar and cosmic radiation

32. (a) **Identify five limitations of early forms of communication** (5mks)

- They could not reach far away places
- Some could not be used at all times e.g. fire or smoke at night
- Weather restriction- some could not be used when its raining, windy, misty
- Distortion and misinterpretation of messages
- Confidentiality was not guaranteed
- Speed limit- delivery of message was slow depending on the mode of transport
- They could only deliver limited messages
- They could not reach large audience e.g. messengers
- Messages could not be stored or recorded for future references

(b) **Explain five disadvantages of railway transport (10mks)**

- Railways are expensive to construct, the wagons are expensive to buy and maintain
- Its less flexible: Railway line cannot pass through some landscapes. They require relatively flat surface
- Smoke emitted by train leads to environmental pollution
- Their accidents are fatal when they occur e.g. 1998 accident in Kenya
- It does not go beyond land. Not self sufficient and has to be supplemented by roads transport
- Railway lines were used by colonial powers to exploit other country's resources
- Non –electric railways are slow

Points should be explained 5 x 2 = 10 marks