1. a) Define the term Data Communication.
b) Explain any three elements of a successful data communication.

2. a) What are data communication tools?
b) Differentiate between Electronic and manual data communication tools giving examples in each case.

3. a) What is data transmission?
b) Explain any two types of data transmission modes.
c) Mention any two examples of both guided and Unguided Transmission media.
d) State any two advantages and disadvantages of using physical transmission rather than wireless transmission media.

4. a) Explain any three services offered by data communication tools.
b) What are the implications of using data communication services?

5. a) Define a computer Network.
b) Explain any two network models.
c) List the basic requirements necessary for setting up a computer network.

d) What are the advantages and disadvantages of
   i. Peer to Peer network.
   ii. Client to Server network.

6. a) What is meant by the term networking Hardware?
b) Explain any three networking hardware that can be used for a computer laboratory.

7. a) What are the advantages of installing a network to a school?
b) What are the disadvantages of network installation?

8. a) Explain the following terms in relation to computer networks.
   i. Intranet
   ii. Extranet
   iii. Internet

   b) Explain any three types of computer Networks.

9. a) State any three methods of connecting to the internet.
b) Give any four factors to consider before selecting an Internet Service Provider.
c) List any two ISPs in your area.
10. a) What are the factors that usually affect the speed of an internet connection?  
b) State the advantages and disadvantages of using the Internet.

11. a) Define the term Cloud Computing.  
b) Explain any four services offered by the internet.  
c) Give the advantages and disadvantages of cloud computing.

12. a) Give any four advantages and disadvantages of using emails for communication.  
b) Explain the major components of an email message.

13. a) Explain the concept of Netiquette.  
b) Mention any four Netiquette guidelines.

14. a) Distinguish between a web browser and a web page.  
b) Explain the following terms in relation to websites.  
   i. URL  
   ii. Domain Name  
   iii. Website  
c) Give any two examples of websites.

15. Given the URL below, use it to answer questions that follow.  
http://www.spyk.co.ug/Gossip/Politics/Ruhare.html  
a) Identify the Top level domain.  
b) State the name of the document being viewed  
c) Write the host identifier.  
d) Give the immediate sub folder to the Ruhare article.

16. a) Twitter, Facebook and WhatsApp have taken over the world, State a general name for such applications.  
b) Mention the advantages and disadvantages of using the applications mentioned above.  
c) What are the differences between a blog and a wiki?

Wishing you success in your examinations.  
END.