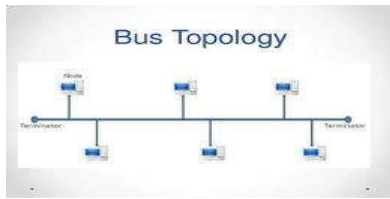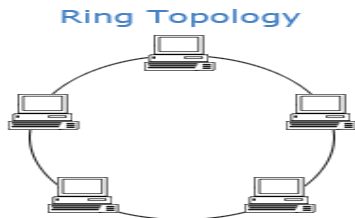Bus Topology: There is a main cable called bus from the server to which every nodes are connected by short drop cables. A small device called terminator is attached at the end of the bus. When a data signal reaches the terminator at the end, it is absorbed and the bus is free to carry new signal.

Ring Topology: All node computers are connected to a circular cable. All data are passing through this cable.

39. Write any two advantages of networks.   **[March 2015, Score 2]**

Ans.   1. Resource Sharing : Sharing of hardware and software resources is easy.

            2. Reliability : Since many computers share the data, it is easy to recover from failures.

40. What are the advantages of Wi-Fi network ?   **[March 2015, score 3]**

Ans. In Wi - Fi network, line of sight between communicating devices is not required.

High data transmission speed.

Wi – Fi Can connect more devices.

****

Chapter - 9   Internet

1. Explain cc and bcc sections in email   **[March 2020, Score 2]**

   Ans. Cc (Carbon copy): The e-mail address of secondary recipient.

      Bcc (Blind carbon copy): The e-mail address to which blind carbon copies are to be sent.

2. What is search engine? Write any two examples   **[March 2020, Score 2]**

3. **Ans**. Search engine programs search documents available on World Wide Web for specified keywords and return a list of the documents/web pages matching the keywords. Search engine web sites use programs called web crawlers or spiders or robots to search the web. The search

engine website stores these keywords along with their URLs to form an index in the search engine's web servers. When we use the search engine website to search a particular topic (keyword), it does not search the World Wide Web. Search engine select a list of URLs where the particular topic is found from the index and displays it as the result

  Eg: Google, Bing

4. Find the odd one from the following :   **[July 2019, Score 1]**
      (a) Google Chrome (c) Android (b) Opera (d) Safari

   Ans. Android

5. Define the terms : (a) Phishing (b) Hacking   **[July 2019, Score 2]**
   Ans.(a) Phishing is an attempt to acquire information such as usernames, passwords and credit card details by posing as the original website, mostly that of banks and other financial institutions.

      (b) Hacking is a technical effort to manipulate the normal behaviour of network connections and connected systems. Hacking is performed both by computer security experts and by computer criminals.

6. What are the hardware and software requirements for connecting a computer to the internet?
                                                                          [July 2019, Score 2]

   Ans. The hardware and software requirements for internet are:
      1) A Computer with a facility to connect modem (ie a computer with Network Interface Card).
      2) Modem.
       3) Telephone connection.
      4) An account with ISP(Internet service Providers).
      5) Web browser.

7. E-mail is a popular communication tool. Discuss any two advantages of email.
                                                                          [March 2019, Score 2]

   Ans. Advantages of email:
      1. Speed : An email is delivered instantly within no time.
      2. Easy to use : It is very easy to send and receive e-mail.

8. Your, friend wants to take an internet connection. Explain and compare any three types of broadband connectivity available now-a-days.   **[March 2019, Score 3]**

   Ans. 1) ISDN (Integrated Service Digital Network)**:** ISDN is a type of broadband connection capable of carrying voice and digital data. It uses ordinary telephone lines. It supports speed up to 2Mbps.

 2) Cable internet**:** Cable internet is a form of broadband internet access using cable network. It uses cable line instead of telephone line. It is faster than dial up. The speed ranges from 1 to 10 Mbps.

3) DSL (Digital subscriber Line): DSL is a technology that provides internet access using local telephone network. It is primarily used in homes and small businesses. ADSL (Asymmetric Digital

subscriber Line) is a type of DSL. ADSL connections provide comparatively more bandwidth for downloads than for uploads. While DSL uploads and downloads at the same speed. The speed of ADSL is from 256 Kbps to 24Mbps.

9. Give an example for search engine. **[July 2018, Score 1]**

Ans. Google

10. List the hardware and software requirements for connecting computer to internet

[July 2018, Score 2]

Ans. The hardware and software requirements for internet are:

1) A Computer with a facility to connect modem (ie a computer with Network Interface Card).

2) Modem.

3) Telephone connection.

4) An account with ISP(Internet service Providers).

5) Web browser.

11. Write any two drawbacks in using social media. **[March 2018, Score 2]**

Ans. The drawbacks in using social media are:

i. Addiction: addiction to social media wastes our valuable time. It negatively affects our mental states and leads to depression.

ii. Spread rumours: Social media spreads negative information and misinformation at an incredible speed.

12. Explain briefly about the wireless broadband connectivity methods used for internet connection

[March 2018, Score 3]

Ans. 1) Mobile broadband: Mobile broadband refers to accessing high speed internet through mobile networks, using mobile phone, tablets etc.

2) Wi – MAX: Wi - Max stands for Worldwide Interoperability for Microwave Access. It provides maximum speed of 70 Mbps. Wi – Max offers internet access up to a distance of 50 Km.

3) Satellite broadband**:** Satellite broadband is internet connectivity provided using satellite. It is mainly used in remote places. Its download speed is up to 1 Gbps.

13. The small text files used by browsers to remember e-mail id, user name, etc. are known as ....

[July 2017, Score 1]

Ans Cookies

14. Internet offers a variety of services and they are used widely around the world.

a) One of these services requires an address like journey23@gmail.com. Name this service and write the reasons for the wide use of this service. **[July 2017, Score 3]**

b) Name the service which provides a list of websites containing information about a word or a phrase. **[July 2017, Score 1]**

Ans. a) E-mail. Because of:

i. Speed : An email is delivered instantly within no time.

ii.   Easy to use : It is very easy to send and receive e-mail.

b) Search engine

eg: google

15. Which one of the following is not a search engine ?   **[March 2017, Score 1]**

a) Google
b) Bing
c) Facebook
d) Ask

Ans. Facebook

16. Your friend Ravi purchased a new PC for his personal use. Mention the components required to connect this PC to internet.   **[March 2017, Score 3]**

Ans. 1) A Computer with a facility to connect modem (ie a computer with Network   Interface Card).

2) Modem.

3) Telephone connection.

4) An account with ISP(Internet service Providers).

5) Web browser

17. Which one of the following is NOT a web browser?   **[July 2016, Score 1]**

a) Mozilla Firefox   b) Google   c) Internet Explorer   d) Opera

Ans. Google.

18. Which one of the following statements is not true about e - mail?   **[July 2016, Score 1]**

a) E-mail is environment friendly as it do not use paper.

b) E-mail provides provision to attach text, audio, video and graphics.

c) E-mail will not spread any kind of viruses.

c) E-mail can be used to send same message to many recipients simultaneously.

Ans. c) E-mail will not spread any kind of viruses.

19. List bad effects if any in using social media.   **[July 2016, Score 3]**

Ans. The bad effects of using social media are:

i)   Intrusion to privacy: the personal information of users can used for illegal activities.

ii)   Addiction: addiction to social media wastes our valuable time. It negatively affects our mental states and leads to depression.

iii)   Spread rumours: Social media spreads negative information and misinformation at an incredible speed.

20. Pick the odd one out.   **[March 2016, Score 1]**

a) Virus   b) Trojan horse   c) Wikis   d) Worm

Ans. Wikis

21. Mr. Prasanth has bought a new laptop. He wants to take an Internet connection. **[March 2016]**

a) Explain him various types of broadband connectivity available in the market. **[Score 3]**

b) Suggest a web browser for him. **[Score 1]**

Ans. a) Internet access can be provided using different broadband technologies, such as ISDN, Cable internet, DSL, Leased line and FTTH.

1) ISDN (Integrated Service Digital Network): ISDN is a type of broadband connection capable of carrying voice and digital data. It uses ordinary telephone lines. It supports speed up to 2Mbps.

2) Cable internet: Cable internet is a form of broadband internet access using cable network. It uses cable line instead of telephone line. It is faster than dial up. The speed ranges from 1 to 10 Mbps.

3) DSL (Digital subscriber Line): DSL is a technology that provides internet access using local telephone network. It is primarily used in homes and small businesses.

4) Leased line**:** Leased line internet connection provides a permanent connection between two points. It is usually used by business organizations etc. Its speed ranges from 2Mbps to 100 Mbps.

5) Fiber To The Home (FTTH): FTTH uses optical cable for data transmission. It is used to provide high speed internet to home users. It has high bandwidth and low error rates. It is highly reliable, secure and has high bandwidth·

b) Google Chrome.

22. A device that regenerates the incoming signals and retransmits them to their destination is called ……….. **[July 2015, Score 1]**

Ans. Repeater

23. George needs to prepare for a seminar on 'Backwaters in Kerala'. **[July 2015]**

a) Name any search engine through which George can get information about the topic. **[Score1]**

b) Explain the working behind the search engines to display the information about the seminar topic.

[Score 3]

Ans. a) Google.

b) A search engine is a software program used to search information on the World Wide Web.

Working of Search engines use a program called crawlers or spiders or robots to search the web.

The list of documents collected by spiders are stored in database as index. When a search key is given to the search engine searches the database and displays the result.

24. Consider the relation given below. **[July 2015, Score 1]**

Social network : facebook.com

Which among the following share a similar relationship as the above?

a) micro blog : blogger.com

b) social blog : twitter.com

c) content community : . youtube.com

d) internet forum : linkedin.com

Ans. content community: youtube.com

25. …….. is a software used for removing worms and trojans. **[March 2015, Score 1]**

Ans. Antivirus.

26. What are the guidelines one must follow for using computers over the internet ?

Ans. i. Do not open any email attachment that we are not sure.

ii. Download files only from reputed sources.

iii. Avoid clicking on popup advertisements.

iv. Use strong passwords

v. Update antivirus regularly

vi. keep a regular backup of our files.

27. Who introduced the term www?   **[March 2015, Score1]**

Ans. Tim Berners Lee

****

Chapter - 10 IT Applications

1. Define the term Tele conferencing   **[March 2020, Score 2]**

Ans. Teleconferencing is a meeting or conference held between two or more parties in remote locations by use of ICT.

2. Write any three advantages of e-business   **[March 2020, Score 3]**

Ans.

- Overcomes geographical limitations.
- Reduces the operational cost
- Minimises travel time and cost.
- It remains open all the time.

3. What are the benefits of e-Governance ?   **[July 2019, Score 2]**

Ans.   i). Leads to automation of government services.

ii). Strengthen Democracy

iii). More transparency in the functioning

iv). Increase the responsibility of government departments

4. Summarise major benefits of e-Learning.   **[July 2019 , Score 2]**

Ans. i). It offers variety of courses from national and international institutions to a large number of students from distant locations.

ii). Low cost

iii). No time and space limitations

5. Write any two challenges for implementing e-Governance   **[March 2019, Score 2]**

Ans.   i). e-Literacy is necessary