Chapter - 12 Internet and Mobile Computing

1. What is FTTH? Explain its merits.

[March 2020, Score 2]

Ans. Fiber To The Home

Merits:

- 1. High Bandwidth
- 2. High Speed
- **2.** Describe about search engines with example.

[March 2020, Score 2]

Ans. Search engine websites are special programs that are designed to help people to find information available in World Wide Web. Search engine web sites use programs called web crawlers or spiders or robots to search the web. Web crawlers search the web pages stored in the different web servers and find possible keywords

3. List the advantages of e-mail.

Ans. Advantages of e-mail:

The following are the advantages of using e-mail,

- 1. Speed: An email is delivered instantly.
- 2. Easy to use: It is easy to send and receive e-mail.
- 3. Cost-Effective: It is cheaper than other forms communication.
- 4. Easy to reference: Sent and received e-mail messages can be stored safely.
- 5. Environment friendly: E-mail avoids use of paper hence saves trees.
- 6. Available anywhere at any time.

4. Describe briefly about any two advantages of E-mail.

Ans. 1.Speed: An e-mail is delivered instantly to any location across the world. We can send the same e-mail to multiple users simultaneously.

2. Easy to use: We can send and receive e-mails and save them easily on our computer.

5. Compare the Dial - up connection and Wired broadband connection

[March 2020, Score 3]

[July 2019, Score 2]

Ans.

Dial-up	Wired broadband
Slow connections speed up to	High seed connection speed higher
56kbps	than 256 kbps
Requires dialing to connect to ISP	Always On connection
Used telephone lines exclusively	Simultaneous use of voice and
	internet
Uses dial-up modem	Uses broadband modem

6. Write the advantages of social media.

[March 2019, Score 2]

Ans. 1. Bring people together: Social networking allows people to find long-lost childhood friends and make new ones.

2. Plan and organise events: These sites help users to organise and participate in events.

3. Business promotion: Social media offers opportunities for businesses to connect with customers, implement marketing campaigns, manage reputation, etc.

4. Social skills: These sites allow people to express their views over a particular issue and become an agent for social change.

7. What is the role of Firewall and Anti-virus scanner in computer networks?

[March 2019, Score 3]

Ans. Firewall: A firewall is a system used to provide security to a computer network. It filters all data incoming and leaving the computer network. It can be either hardware or software based.

Anti-virus: An anti-virus is a software used to detect and remove virus and malware. It uses virus definition to detect viruses. The infected files are stored in a special area called quarantine, which can be removed later.

8. Name any four Mobile Operating Systems.

[July 2018, Score 2]

Ans. Android from Google

iOS from Apple

BlackBerry OS from BlackBerry

Windows Phone from Microsoft.

9. What is firewall?

[March 2018, Score 2]

Ans. A firewall is a system used to provide security to a computer network. It filters all data incoming and leaving the computer network. It can be either hardware, software-based o both.

10. What is phishing?

[March 2018, Score 2]

Ans. Phishing is an attempt to acquire sensitive information such as user name, password, credit card details. The phishing websites have URLs and home pages similar to their original ones. The act of creating such a misleading website is called spoofing.

11. SIM card is a smart card used inside a mobile phone. What is the full form of SIM?

[July 2017, Score 1]

- a) Subscriber Identity Module
- b) Subscriber Identity Mobile
- c) Subscriber Identification Mobile
- d) Single Identity Mobile

Ans. a) Subscriber Identity Module

12. Which one of the following terms refers to ethical hacker?

a) Black hat b) Blue hat c) Grey hat d) White hat

Ans. d) White hat

13. Explain the influence of social media in society.

Ans. Social media can be very influential on society in both positive and negative ways. It gives people a way to stay in touch with people who live far away. It lets people share fun, interesting and informative content. It gives businesses a way to engage with customers. Social media has made it very easy to spread information quickly.

The personal information of users can be used for illegal activities. Information like the e-mail address, name, location and age can be used to commit online crimes. Addiction to these sites wastes our valuable time. It will negatively affect our mental states.

14. Find the best matches from the given definition for the terms in the given list.

(worm, Hacking, Phishing, Spam)

a. Unsolicited emails send indiscriminately

[July 2017, Score 1]

[July 2017, Score 3]

[March 2017, Score 2]

- b. Technical effort to manipulate the normal behavior of networked computer system
- c. A standalone malware program usually makes the data traffic slow.
- d. Attempt to acquire information like username and passwords by posting as the original website.
- e. Appear to be useful software, but will do damage by deleting necessary files.

Ans. Worm- c) A standalone malware program usually makes the data traffic slow.

Hashing –b. Technical effort to manipulate the normal behavior of networked computer system.

Phishing – d) Attempt to acquire information like username and passwords by posting as the original website.

Spam – a) Unsolicited emails send indiscriminately

15. Susheel's Gmail id is <u>susheel@gmail.com.</u> He sends an email to rani whose email id is <u>rani@yahoo.com</u>. How is the mail sent from Susheel's computer to Rani's Computer?

[March 2017, Score 3]

Ans. The first part Susheel is the username that identifies the address and the second part gmail.com is the domain name of the e-mail server, i.e., the name of the e-mail service provider.

When an e-mail is sent from Susheel's computer using web mail or e-mail client software, it reaches the e-mail server of our e-mail service provider. From there the message is routed from sender's e-mail server all the way to the rani's e-mail server. The recipient's e-mail server then delivers the e-mail to the recipient's mail box (inbox), which stores the e-mail and waits for the user to read it. Simple Mail Transfer Protocol (SMTP) is used for e-mail transmission across Internet.

16. Which one of the following technologies is used for locating geographic positions according to satellite-based navigation system?

 [July 2016, Score 1]

- a. MMS
- b. GPS
- c. GSM
- d. SMS

Ans. b. GPS

17. What is browsing? Briefly explain the steps needed for browsing. [July 2016, Score 3]

Ans. Browsing refers to visiting web pages using a web browser. It is also known as surfing. The steps used by a web browser to display web pages

1. The web browser obtains the IP address corresponding to the DNS portion of URL.

- 2. Using the IP, a TCP connection is established between web browser and web server.
- 3. The web browser sends request for web pages to server.
- 4. The web server locates the pages and sends to the browser.
- 5. The browser accepts the pages, interprets and displays the content.
- 6. Breaks the TCP connection.
- **18.** Pick the odd one from the following list
 - a. Spam
 - b. Trojan horse
 - c. Phishing
 - d. Firewall
- .Ans. d. Firewall
- **19.** Write the full form of FTTH.

Ans. Fiber To The Home

20. Which one of the following statements is True in relation with Wi-Max internet connectivity.

[March 2016, Score 1]

- a) Make use of satellite connection
- b) Use cable connection
- c) Uses laser beam for connection
- d) Microwave is used for connectivity.

Ans. Microwave is used for connectivity

21. Explain any three mobile communication services

[March 2016, Score 3]

Ans. Short Message Service (SMS): Short Message Service (SMS) is a text messaging service in mobile communication systems that allows exchanging short text messages. SMS is the most widely used data application by mobile phone users

Multimedia Messaging Service (MMS): Multimedia Messaging Service (MMS) is a way to send and receive messages that consists of multimedia content using mobile phones. MMS does not specify a

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[March 2016, Score 1]

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maximum size for a multimedia message. MMS supports contents such as text, graphics, music, video clips and more.

Global Positioning System (GPS) :The Global Positioning System (GPS) is a satellite based navigation system that is used to locate a geographical position anywhere on earth, using its longitude and latitude. GPS consists of satellites, control and monitoring stations, and receivers. The basis of the GPS is a group of satellites that are continuously orbiting the earth.

22. Define Internet. Compare two types of internet connectivity namely dial up and broadband.

[March 2016, Score 1]

Ans. Internet is a collection of interconnected networks for the exchange of data and information.

Dial-up	Wired broadband
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Used telephone lines exclusively	Simultaneous use of voice and
\bigcirc \checkmark	internet
Uses dial-up modem	Uses broadband modem

 23. a). Acquiring information such as username, password, credit card details etc. using misleading websites is known as

 [July 2015, Score1]

b) Pick the odd one out : Google, Safari, Mozilla Firefox, Internet explorer.

[July 2015, Score 1]

Ans.

a. Phishing

b. Google

24. One of your friends wants to send. an email to his father abroad to convey him birthday wishes with a painting done by him. Explain the structure and working of email to him.

[July 2015, Score 3]

Ans. When an e-mail is sent from your computer using web mail or e-mail client software, it reaches the e-mail server of our e-mail service provider. From there the message is routed from sender's e-mail server all the way to the recipient's e-mail server. The recipient's e-mail server then delivers the e-mail to

the recipient's mail box (inbox), which stores the e-mail and waits for the user to read it. Simple Mail Transfer Protocol (SMTP) is used for e-mail transmission across Internet.

25. a) Define intranet

[March 2015, Score 1]

[March 2015, Score 1]

[March 2015, Score 3]

b) Write the structure of an email address.

Ans. a). An Intranet is a privately owned network. For example, the network of a company can be considered as an Intranet. An Intranet is an internal network that uses internet and web technologies.

b) The structure of an e-mail address is username@domain_name.

26. Social media plays an important role in today's life. Write notes supporting and opposing its impact.

Ans. Social media can be very influential on society in both positive and negative ways. It gives people a way to stay in touch with people who live far away. It lets people share fun, interesting and informative content. It gives businesses a way to engage with customers. Social media has made it very easy to spread information quickly.

The personal information of users can be used for illegal activities. Information like the e-mail address, name, location and age can be used to commit online crimes. Addiction to these sites wastes our valuable time. It will negatively affect our mental states. Students may lose concentration and this in turn may affect their studies. Social media will spread the news very quickly. It can facilitate or worsen a crisis by spreading negative information or misinformation at an incredible speed.