Unit-2
Application of Internet

Q-A Objective Type Questions. [14 Marks]

1. WWW Stand for **World Wide Web.**
2. FTP Stand for **File Transfer Protocol.**
3. Firewall is hardware or software application. (**True**/False)
4. List out any five Search Engine

Ans. Google, Yahoo!, Bing, Alta vista, ASK

5. What is Remote Login?

Ans. Remote Login means to access other computer on the network or on the other network by the use of telnet or rlogin command.

6. POP Stand for **Post office Protocol.**
7. SMTP Stand for **Simple/Send Mail Transfer Protocol.**
8. TELNET used **TCP** Protocol for data connection.
9. User name may be up to **64** charters long in email address.
10. **ABC** is not an email Component.
11. **G2G** is an E-Government type.
12. **E-Commerce** is the process of buying selling, or exchanging products, services and information via computer network.
13. **E-Business** is the term used to describe the information systems and application that support and drive business processes most often using web technologies.

Q-B Attempt the Questions (2 mark of each):

1. What is HTTPS?

Ans. Hypertext transfer Protocol Secure (HTTPS) is an extension of the Hypertext transfer protocol (HTTP).

It is used for secure communication over a computer network and is widely used on the Internet.

2. What is RWD?

Ans. Responsive web design (RWD) is an approach to web design that makes web pages render well on a variety of devices and window or screen size.

3. What is Telnet?

Ans. Telnet is a protocol that allows you to connect to remote computer over a TCP/IP network.

4. What is E-Mail?

Ans. E-Mail is information stored on a computer that is exchanged between two users over telecommunications.

E-Mail is a message sent from one computer to another the internet, using a set webmail server address.

5. What is E- Governance?

Ans. E-Governance is the application of information & Communication technologies to transform the efficiency, Effectiveness, transparency and accountability of information & transactional exchanges with government between govt.

6. What is E-Business?

Ans. Electronic business (e-business) refers to the use of the web, internet, intranet, extranet or some combination thereof to conduct business. E-Business is similar to e-commerce, but it goes beyond the simple buying and selling of products and services online.

7. Mobile Commerce?

Ans. M-commerce (**mobile commerce**) is the buying and selling of goods and services through wireless handheld devices such as smartphones and tablets. As a form of e-**commerce**, **m-commerce** enables users to access online shopping platforms without needing to use a desktop computer.

8. What is Web – Server?

Ans. Web servers are computers that deliver (serves up) **Web** pages. Every **Web server** has an IP address and possibly a domain name.

For **example**, if you enter the URL **http**://www.webopedia.com/index.html in your browser, this sends a request to the **Web server** whose domain name is webopedia.com.

9. What is Web Browser?

Ans. web browser, a **browser** is a software application used to locate, retrieve and display content on the World Wide **Web**, including webpages, images, video and other files.

As a client/server model, the **browser** is the client run on a computer or mobile device that contacts the **Web** server and requests information.

10. What is Web Hosting?

Ans. A web host, or web hosting service provider, is a business that provides the technologies and services needed for the website or webpage to be viewed in the Internet.

Websites are hosted, or stored, on special computers called servers.

Q-C Attempt the Questions (3 mark of each):

1. what is FTP? Explain in details.

Ans. <u>Definition:</u>

- FTP is the name of the application and the protocol used for moving files between two hosts on a TCP/IP network.

Client and Server :

- There are two machine involved in an ftp transaction, a client machine, which is sometimes called the **local host** and a **server machine**, which is sometimes called the **remote host.**
- The client is always the machine that initiates the transfer.
- During an ftp session, it is extremely important to keep track of which machine is the client and which is the server, because this will determine whether you uses a get command or a put command to move files.

What is Anonymous FTP?

- They are often called anonymous ftp servers because the guest login name is anonymous.
- Only one data transfer can occur for each data connection.
- If multiple data transfer are required for a single FTP session, one distinct connection will be opened for each transfer.

FTP Connections:

- **FTP** uses TCP as a transport protocol to provide reliable end-to-end connections.
- More importantly, there are 2 distinct types of FTP connections: Control and Data.

2. Explain Advantages and Disadvantages E-Business.

Ans. <u>Advantages of E-Business:</u>

- With the use of e-commerce you can promote your product globally.
- Reduces Time and money spent.
- Gives a competitive advantages.
- Removes Locations and availability restrictions
- Heightens customer service.
- Elderly and disabled people do not have to leave their home.

Disadvantages of E-Business:

- **Security**-there are still some people who don't think it is safe to buy on line therefore as their isn't a high-street shop will lose their custom
- You may not receive what you believe you have purchased.
- Things such as viruses could mean losing the site or affecting your customer's computers while on your website.
- If you book a holiday, the 'company 'also knows when you are out.

3. Explain Types of E-Business.

1. **Business-to-Business (B2B) Model:**
   - The B2B model involves electronic transactions for ordering, purchasing, as well as other administrative tasks between houses.
   - It can automatic maintain the movement of the supply chain and the manufacturing and procuring processes.
2. **Business-to-Consumer(B2C)Model:**
   - The B2C Model involves transactions between organizations.
   - It's applies to any business organization that sells its product or services to consumers over the Internet.
3. **Consumer-to-Consumer (C2C)Model:**
   - The C2C Model involves transaction between consumers.
   - Consumer sells directly to another consumer.
   - Website that provides a consumer to advertise and sell their products online to another consumer.
4. **Consumer-to-Business(C2B) Model:**
   - The C2B Model involves a transactions that is conducted between a consumer and a business organization.
   - It is similar to the B2C model, however, the difference is that in this case the consumer is the seller and the business organization is the buyer.
5. **Peer-to-peer(P2P) Model:**
   - It is a discipline that deal itself which assists people to instantly shares related computer files and computer sources without having to interact with central web server.
   - If you are going to implement this model, both sides demand to install the expected software so that could able to convey on the mutual platform.

4. Difference between E-Commerce and E-Business.

E-Commerce	E-Business
1. E-Commerce involves commercial transactions done over internet.	1. E-Business conduct of business processes on the internet.
2. E-Commerce is subset of E-business	2. E-business is subset of E-commerce.
3. E-Commerce usually require the use of just a website.	3. E-business in involves the use of CRM'S.ERP'S that connect different business processes.
4. E-Commerce just involves buying and selling of product and services.	4. E-business includes all kind of pre-sale and post-safe efforts.
5. Example: Buying of pen drive from Amazon.com, alibaba.com is considered e-commerce.	5. Example: Using of internet by dell. Amazon for maintaining business processes like. Online customer support. Email marketing supply chain management.

5. What is Search Engine? How Search Engine Works?

Ans.

Definition :

- Search Engine are a program that search document for specified keyword and return a list of the documents where the keyboard were found.
- Search Engine is a really a general class of programs.
- The term is often used to specifically describe systems like Google, Bing and Yahoo! Search that enable users to search for documents on the WWW (World Wide Web).

How Search Engine Works?

❖ **Internet Search Engine :**

- Internet Search Engine are special sites on the Web that are designed to help people find information stored on other sites.

❖ **Technical Point of View :**

- Web search engines work by sending out a spider to fetch as many documents as possible.

❖ **Searcher Point of View :**

- Search Engine software quickly sorts through literally millions of pages in its database to find matches to this query.

Q-D Attempt the Questions (5 mark of each):

1. What is WWW? Explain History and Components of WWW.

Ans. Definition:

- The World Wide Web is the universe of network accessible information, the embodiment of human knowledge.

Introduction:

- WWW Stand for "World Wide Web. "It is important to know that this is not a synonym for the internet.
  The World Wide Web, or just "the Web." As ordinary people call it, is a subset of the Internet.

WWW-History:

- 1989-1990-Tim Berners-Lee invents the World Wide Web at CERN.
- Communication via application level protocol.
- Simple and easy to use.

WWW Components:

- Structural Components
- Semantic Components
- Extensible Markup Language(XML)

2. Write a note on types of Payment System.

Ans.

Definition :

Payment system is any system used to settle financial transactions through the transfer of monetary value. This includes the institutions, instruments, people, rules, procedures, standards, and technologies that make its exchange possible.

Types of Payment System :

1. **Digital Cash:**
   - User A obtains **digital cash** "coins" from her bank (and the bank deducts a corresponding amount from her account).
   - The user is now entitled to use the coins by giving them to another user B, which might be a merchant. ... They can then pay the **cash** into their account at the bank.

2. **Electronic - Cheque :**
   - An **E- Cheque** is an **electronic** money transfer that moves money directly from your bank account, through your PayPal account, into another user's PayPal account.
   - **E- Cheques**, like paper **cheques**, can take up to 10 working days to clear. You didn't have an active card on your account at the time of paying.
3. **Smart Card :**
   - A **smart card** is a physical **card** that has an embedded integrated chip that acts as a security token. **Smart cards** capable of short-range wireless connectivity can also be used for contactless **payment systems** they can also be used as tokens for multifactor authentication.
4. **Debit Card:**
   - A **debit card** is a **payment card** that deducts money directly from a consumer's checking account to **pay** for a purchase.
   - **Debit cards** eliminate the need to carry cash or physical checks to make purchases directly from your savings.
5. **Credit Card:**
   - A **credit card** is a **system** of **payment** named after the small plastic **card** issued to users of the **system**. A
   - **Credit card** is different from a debit **card** in that it does not remove money from the user's account after every transaction.

3. Different between Static and Dynamic Website.

Ans.

Static websites	Dynamic websites
Static websites contain fixed number of pages.	Dynamic websites can create webpage dynamically.
Theme of website and content of webpage are fixed.	Webpage design and content may change on run time.
Static websites load quickly on client browser because it has only some markup contents.	Dynamic sites take some time to load on client browser because it processes the request server side and create contents dynamically.
Static sites never use database connectivity.	Dynamic sites deal with database and generate the contents dynamically using database queries.
Static websites is highly secure than dynamic sites because it behaves as a half duplex approach so only one way communication is possible i.e. server to client.	Dynamic sites are less secure because it behaves as full duplex approach so both side communications is possible so user can change the server data.
Static site use for provide some information to the clients like an organization or institute website.	Dynamic website use where content changes frequently on run time. Like a E-commerce site, online examination, etc.
Static website directly run on browser and does not require other server application language. Static website can be created from HTML and CSS.	Dynamic website run the application on server and the output will display on webpage. So this is require server application language like PHP , Asp.NET, JSP etc.
Static sites are easy to develop and a bit experienced people can develop it.	Dynamic websites not easy to develop because require qualify developers to create it, manage it, test it and maintain security of application and database.
In static website if we want to change the page content then we have to upload that page on server many times.	Dynamic sites provide the facilities that it possible to change the page content using server application. And need not to upload the page on server.

4. Explain following in detail DNS, URL.

Ans.

DNS:

- The Domain Name System (DNS) is the phonebook of the Internet. Humans access information online through domain names, like nytimes.com or espn.com.
- Web browsers interact through Internet Protocol (IP) addresses.
- DNS translates domain names to IP addresses so browsers can load Internet resources.
- DNS servers eliminate the need for humans to memorize IP addresses such as 192.168.1.1 (in IPv4), or more complex newer alphanumeric IP addresses such as 2400:cb00:2048:1::c629:d7a2 (in IPv6).
- The process of DNS resolution involves converting a hostname (such as www.example.com) into a computer-friendly IP address (such as 192.168.1.1).
- An IP address is given to each device on the Internet, and that address is necessary to find the appropriate Internet device - like a street address is used to find a particular home.
- When a user wants to load a webpage, a translation must occur between what a user types into their web browser (example.com) and the machine-friendly address necessary to locate the example.com webpage.

URL:

- A **Uniform Resource Locator** (**URL**), colloquially termed a **web address**, is a reference to a web resource that specifies its location on a computer network and a mechanism for retrieving it.
- A URL is a specific type of Uniform Resource Identifier (URI), although many people use the two terms interchangeably.
- URLs occur most commonly to reference web pages (http), but are also used for file transfer (ftp), email (mailto), database access (JDBC), and many other applications.

- Most web browsers display the URL of a web page above the page in an address bar.
- A typical URL could have the form `http://www.example.com/index.html`, which indicates a protocol (`http`), a hostname (`www.example.com`), and a file name (`index.html`).

5. Explain Network Security Concepts.

Ans.

Definition :

Network security consists of the policies and practices adopted to prevent and monitor unauthorized access, misuse, modification, or denial of a computer **network** and **network**-accessible resources.

Cyber Law :

- **Cyber law** is the part of the overall legal system that deals with the Internet, **cyberspace**, and their respective legal issues. **Cyber law** covers a fairly broad area, encompassing several subtopics including freedom of expression, access to and usage of the Internet, and online privacy.

Firewall and Cookies :

❖ **Firewall :**

- A firewall is a network security device that monitors incoming and outgoing network traffic and permits or blocks data packets based on a set of security rules.
- Its purpose is to establish a barrier between your internal network and incoming traffic from external sources (such as the internet) in order to block malicious traffic like viruses and hackers.

❖ **Cookies :**

- A **cookie** is a mechanism that allows the server to store its own information about a user on the user's own computer.
- You can view the **cookies** that have been stored on your hard disk (although the content stored in each **cookie** may not make much sense to you).
- The location of the **cookies** depends on the browser.

Hackers and Crackers:

❖ **Hackers :**

- A **hacker** is an individual who uses computer, **networking** or other skills to overcome a technical problem.
- The term **hacker** may refer to anyone with technical skills, but it often refers to a person who uses his or her abilities to gain unauthorized access to systems or **networks** in order to commit crimes.

❖ **Crackers :**

- A **cracker** is someone who breaks into someone else's computer system, often on a **network** by passes passwords or licenses in computer programs or in other ways intentionally breaches computer **security**.
- The term "**cracker**" is not to be confused with "hacker". Hackers generally deplore cracking.