R.S.M. Public School,Supaul (Bihar)

Class – Tenth   Subject-> IT (Code-402)

Questions & Answers

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PART B: Vocational Skills
Chapter: Web Applications (Basic)

Fill in the blanks

1. The option in Microsoft Windows XP used for helping users with physical disabilities and to reduce repetitive strain is **Sticky Keys**.
2. **Sound Sentry** is designed to help users with **auditory** impairments.
3. The High Contrast option in Microsoft Windows XP is designed to assist people with **Vision** impairments.
4. **Serial Keys** is designed to assist people that have difficulty using a keyboard or a mouse.
5. The acronym for LAN is **Local Area Network**.
6. Three types of Wired Internet Connectivity are **Dial-UP**, **DSL**& **Cable Internet Access**.
7. Three types of Wireless Internet Connectivity are **3G**, **WiMAX** & **Wi-Fi**.
8. **Instant Messaging** is a form of communication over the Internet that offers an instantaneous transmission of text-based messages from sender to receiver.
9. **Microphones**, **headsets** & **speaker** & Web Camera are required for audio and video conferencing.
10. **Filter Keys** is an accessibility function that tells the keyboard to ignore brief or repeated keystrokes, making typing easier for people with hand tremors.
11. When data is transferred on the internet, data is broken up into bits of same sized pieces called **packets**.

Answer the following:
Q1. What is the significance of Accessibility options in a computer?
Ans.-> Computer Accessibility refers to the user friendliness of a computer system for all, regardless of their disability. This is mainly a software issue. However, when a combination of hardware and software, it enables a person with a disability or impairment to use a computer. It is known as Assistive Technology. There are numerous types of impairment that impact computer usage. These include:

- Cognitive impairments and learning disabilities, such as dyslexia, attention deficit-hyperactivity disorder (ADHD) or autism.
- Visual impairment such as low-vision, complete or partial blindness, and color blindness.
- Hearing impairment including deafness.
- Motor or dexterity impairment such as paralysis, cerebral palsy, or carpal tunnel syndrome and repetitive strain injury.

Ans.-> The steps are :

- Click on **Start**.
- Click on **Control Panel**.
- Click the **Ease of Access** link.
- Click **Ease of Access Center** link.

Turn on Mouse Keys checkbox to allow the user make use of arrow keys on the numeric keypad to move the keys on screen and Enter key to click. For example, user can press top arrow and left arrow key to move mouse pointer diagonally upwards towards left side.

Turn on Sticky Keys checkbox allows user to keep the key active when it is pressed once and when any other key is pressed then it is processed by the computer with the currently active key. For example, if user has pressed Window key on the keyboard then it will remain active. Now, if user clicks only letter E then it will be interpreted as Windows+E and Windows Explorer will open up.

Once enabled, sticky keys icon will appear in the system tray.

Turn on Filter Keys check box, when selected, makes keyboard ignore rapidly repeated or long pressed key to avoid repeated typing of the same key thereby helping people who type with trembling hand.

Q3. How will you setup visual feedbacks to appear on the screen instead of sound?

Ans.->

• Click on **Start**.

• Click on **Control Panel**.

• Click the **Ease of Access** link.

• Click **Ease of Access Center** link.

• Click on **Use text or visual alternatives for sounds** in **Ease of Access Center**.

Sound Sentry or **Turn on visual notifications for sounds** option replaces system sounds with visual warnings like flashing caption bar of active window, flashing the active window itself and flash desktop. Select the desired visual warning.

Any sound that reads the screen can be turned into text caption that appear on the screen by checking **Turn on text captions for spoken dialog** checkbox.

Q4. Explain the use of Narrator and Magnifier for a visually challenged person.

Ans.-> **Narrator** allows read aloud of any text on the screen and **Turn on Audio Description** option lets visually impaired person hear descriptions of what is happening in any videos.

Magnifier lets user move mouse pointer on the screen and see the objects larger in size. This mode is called **lens mode**. In **docked mode** a portion of the screen can be left magnified and rest of the screen remans normal. This portion can be changed as required. **Full screen mode** magnifies whole screen. Lens size, focus area, zoom level etc. can be set by the user.

Q5. How will you change the size of the mouse cursor and setup the mouse pointer so that it hovers on a window and that window activates.

Ans.-> • Click on **Start**.

• Click on **Control Panel**.

• Click the **Ease of Access** link.

• Click **Ease of Access Center** link.

• Click on **Use text or visual alternatives for sounds** in **Ease of Access Center**.

• In **Ease of Access Center**, click **Make the mouse keys easier to use** link.

Here, you can change the colour and size of mouse pointers. You can turn on mouse keys of numeric keypad. You can set option to activate any window just by bringing mouse pointer over it instead of having to click it.

Q6. What is a network? What are the advantages of networking?

Ans.-> A computer network is a collection of computers and other hardware components interconnected by communication channels (cables or satellites) that allow sharing of resources and information.

Advantages of networking

• **Data Sharing**: One of the most important uses of networking is to allow the sharing of data. Users can send text files, spread sheets, documents, presentations, audio files, video files, etc. to other users.

• **Hardware Sharing**: Hardware components such as printers, scanners, etc. can also be shared. For example, instead of purchasing 10 printers for each user, one printer can be purchased and shared among multiple users thus saving cost.

• **Internet Access Sharing**: You can purchase a single Internet connection and share it among other computers in a network instead of purchasing multiple Internet connection for each computer. This is very commonly found in Internet café (browsing centres), schools, colleges, companies, etc.

• **Usage of network based applications** such as web browsers, email clients, chat application, audio & video calling, etc is another advantage.

Q7. What are the different types of networking?

Ans.-> There are three major types of network Local Area Network (LAN), Metropolitan Area Network (MAN) and Wide Area Network (WAN).

Local Area Network: A local area network (LAN) is one which connects computers and devices in a limited geographical area such as home, school, computer laboratory, office building, or closely positioned group of buildings.

Usually local area networks offer very high speeds and are used for connecting computers and peripherals such as printers, scanners, etc. It is useful for sharing resources like files, printers and other applications. A LAN can be set up using wireless media also.

Metropolitan Area Network (MAN)

A Metropolitan Area Network (MAN) is a large network that usually spans a city, but does not extend the boundaries of the immediate town, city, or metropolitan area. Data transfer rate in Metropolitan Area Network is little slower than the Local Area Network. The distance covered by this kind of network enables a large number of users to communicate with each other in the network. For example, network set up by MTNL in Delhi and Mumbai, cable TV network in a city.

Wide Area Network: A wide area network (WAN) is one which covers a broad area (i.e., any network that links across metropolitan, regional, or national boundaries). The Internet is the most popular WAN, and is used by businesses, governments, non-profit organizations, individual consumers, artists, entertainers, and many others.

Q8. What is the significance of a browser on WWW?

Ans.-> Browser is the software application that allows us to visit websites on Internet. The URL of the website is type in the browser's address bar. Once the web site is connected, browser displays its home page from where we can navigate further by clicking on various hyperlinks. Website is a collection of webpages which are displayed by the browser.

Q9. Write short note on types of internet connectivity.

Ans.-> Some of the commonly used Internet connectivity are:

Dial-up: Dial-up Internet access is a form of Internet access that uses the facilities of the public switched telephone network (PSTN) to establish a connection to an Internet service provider (ISP) via telephone lines using a device called MODEM. Dial-up connections are extremely slow.

DSL: Digital subscriber line(DSL) provide Internet access by transmitting digital data over wires of a local telephone network. DSL service is delivered along with wired telephone service on the same telephone line. For using a DSL connection, you need a DSL modem and a subscription.

Cable Internet Access: Cable Internet Access is a form of broadband Internet access that uses the cable television infrastructure. Cable Internet Access is provided through existing cable TV networks.

3G: 3rd Generation is a set of standards used for mobile devices and mobile telecommunication services and networks. High-Speed Downlink Packet Access (HSDPA) is 3G mobile telephony communications protocol that allows higher data transfer speeds and capacity.

WiMAX: Worldwide Interoperability for Microwave Access is a wireless communications standard designed to provide mobile broadband connectivity across cities and countries through a variety of devices.

WI-Fi: Wi-Fi is a popular technology that allows an electronic device such as computers or mobile phones to exchange data wirelessly over a network, including high-speed Internet connections. Wi-Fi devices such as personal computer, smartphones, video game console, etc. can connect to a network resource such as Internet through a device called the Wireless Access Point.

Q10. List any five application based instant messaging software.

Ans.-> Application based instant messaging software is downloaded and installed on user's computer. Some of the popular instant messaging software are:

• Google Talk • Yahoo! Messenger • Skype • Windows Live Messenger • Rediff Bol, etc.

Q11. What do you mean by instant messages?

Ans.-> Instant messaging (IM) is a form of communication over the Internet that offers an instantaneous transmission of text-based messages from sender to receiver. Most instant messaging software include the option for performing file transfers, audio chat, video calling and conferencing, sharing desktops, etc. apart from standard text chat. Instant messaging software is widely used for personal and commercial use.

Q12. State any some rules and etiquettes to be followed while chatting on the Internet.

Ans.-> There are some general rules and etiquettes to be followed while chatting. They are almost the same as those that apply for emails.

• Messages should be short and to the point.

• Always introduce yourself by name if your screen name doesn't reflect it.

• Give people time to respond - Multiple questions sent to a recipient before they've had a chance to answer can seem more like an interrogation rather than a conversation.

• It's important to properly end an IM conversation - you may think the chat is over, but the other person may not. While you're off doing other things, they may be sitting there staring at the screen waiting for further communication from you!!

Q13. Explain the purpose of a blog.

Ans.-> A blog is a discussion style site used by non-technical (or technical users) users for creating personal web pages. Blogs are similar to an online personal diary and simple to use.

Blog is used to convey messages about events, announcements, news, reviews, etc. Blogs are usually managed using a web browser and this requires active internet connection.

Q14. List any 5 websites that provide blog service.

Ans.-> Some of the popular blogs websites include:

• www.WordPress.com   • www.blogger.com • www.blog.com   • www.weebly.com   • www.blogsome.com

Q15. Explain the purpose of an offline blog editor.

Ans.-> You can also use offline blog software to create content first and later publish the content when an active internet connection is available. If you do not have an active internet connection, you can create blogs using a blog application and publish the blog whenever internet connectivity is available.

Q16. List any three offline blog editors.

Ans.-> There are several free offline blog editors available that can be downloaded and installed on the local computer such as: • Qumana   • Windows Live Writer   • Blogdesk

Q17. How will you setup privacy options in any browser?

Ans.-> To clear personal data from a web browser such as Google Chrome, launch the browser.

Click **Tools** Menu > Settings

You can make changes in Privacy settings by scrolling down and clicking **Advanced** option and apply privacy settings according to your preferences.

Q18. Suggest some security measure to ensure safety from online threats.
Or, What are the best practices about internet security?
Ans.-> • Use strong passwords • Regular Data Backup • Encrypt Data • Secure your username and password
• Do not share personal data • Secure transactions • Use antivirus and antispyware software
• Clear browser cookies frequently • Install firewalls • Never install software from unknown sources
• Remove unwanted or unknown software applications

Q19. How will you clear your browsing history and cookies?
Ans.-> To clear personal data from a web browser such as Google Chrome, launch the browser.
Click **Tools** Menu > **More Tools** > **Clear Browsing data…**
The next window will show various options to clear Browsing History, Cookies and Cache.

Q20. Explain the purpose of Online transactions.
Ans.-> Online shopping is a form of electronic commerce where customers can buy or sell goods over the Internet. Customers need to have an active internet connection for viewing goods or services offered by a seller; customers can pay online using a credit, debit card or by internet banking.
    Online shopping could be useful in situations when:
     • A customer does not have sufficient time to visit stores.
     • Visiting a store is more expensive than purchasing a product online.
     • A product or service that is not available in the local market is available online.

Q21. List any five websites that allow online transactions.
Ans.-> **Some of the popular online transaction websites are:**
     • IRCTC, an online portal for booking flight and train tickets.
     • Flipkart, an online shopping portal for buying consumer products.
     • EBay, an online portal for buying and selling goods.
     • Redbus, an online portal for booking bus tickets.
     • Amazon, an online shopping portal for buying consumer products.

Q22. List any three payment tools to use online transactions.
Ans.-> To perform an online transaction, all you need is a web browser and an active internet connection.
In some cases where purchasing is involved, you will need a valid credit card, debit card or online banking support referred to as Net Banking Subscription. Some websites even allow COD (Cash on delivery) where the users can pay once they receive the product or service.

Q23. Explain the purpose of Internet Security.
Ans.-> Internet security is a branch of computer security specifically related to the Internet, often involving browser security but also network security. Its objective is to establish rules and measures to use against attacks over the Internet. The Internet represents an insecure channel for exchanging information leading to a high risk of intrusion or fraud, such as phishing.

Q24. Explain different kinds of online threats.
Ans.-> Though Internet provides valuable information and entertainment, it may leave your computer unsecure due to many online threats. You need to ensure that your usernames, passwords, credit card or online banking information secure as they are prone to be tracked and used by unauthorized users. Some websites can also install Malware on the computer without user consent thereby leaving the computer damaged or insecure.

Online threats such as Phishing, email spoofing, chat spoofing, etc. can increase the chances of users getting compromised.

Q25.Explain the meaning and function of modem.
Ans.-> Á modem is a device that converts digital computer signals into a form (analog signals) that can travel over phone lines. It also re-converts the analog signals back into digital signals. The word modem is derived from its function MOdulator/DEModulator.

Q26. What is Internet?

Ans.-> The Internet is a global system of interconnected computer networks that use the standard Internet protocol suite to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks.

Q27. Describe about Network architecture.

Ans.-> Networks are designed using the following architecture:

Peer-to-peer (P2P) Architecture:

Networks in which all computers have an equal status are called peer to peer networks. Generally in such a network each terminal has an equally competent CPU.

Client-Server Architecture: Networks in which certain computers have special dedicated tasks, providing services to other computers (in the network) are called client server networks. The computer(s) which provide services are called servers and the ones that use these services are called *clients*.

Q28. Write down the process for transferring data on the Internet.

Ans.-> The process for transferring data on the Internet are:

• The data is broken up into bits of same sized pieces called **packets.**

• A **header** is added to each packet.

• Each packet is sent from computer to computer until it finds its **destination.**

• At the destination, the packets are **examined.** If any packets are missing or damaged, a message is sent asking for them to be re-sent.

• The packets are now **reassembled** into their original form.

Q29. What is an ISP?

Ans.-> An Internet service provider (ISP) is an organization which provides you with access to the Internet via a dial-up (using modem) or direct (hard wired) or wireless connection. such as Bharat Sanchar Nigam Limited (BSNL), Airtel, Reliance Jio, etc.

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