

MSD Sanjeevani Public School, Mohan Garden
Subject- Computer Science (with Python)
Class-12th (Non-Med)
Assignment-14 (from ch-10 Computer Network)

| | |
|-----------|---|
| Q1 | Compare FDMA, CDMA, TDMA. |
| Ans | <ul style="list-style-type: none"> • <u>FDMA</u>: It stands for Frequency Division Multiple Access. In this, each user utilizes a portion of the frequency bandwidth available. Each user has its own frequency domain. • <u>CDMA</u> :It stands for Code Division Multiple Access. In this, each user is allocated a unique code sequence. On the sender's end, the data signal is encoded using the given unique code. The receiver decodes the signal according to the unique code and recovers the original data. • <u>TDMA</u> :It stands for Time Division Multiple Access. In this, each user is allowed to transmit only within specified time intervals. Different users transmit in different time slots. When users transmit, they occupy the whole frequency bandwidth. |
| Q2 | What do you mean by IoT? |
| Ans | <p>The Internet of things (IoT) is a system of interrelated computing devices, mechanical and digital machines provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. The definition of the Internet of things has evolved due to the convergence of multiple technologies, commodity sensors and embedded systems. In the consumer market, IoT technology example is the "smart home" covering devices and appliances (such as lighting fixtures, home security systems and cameras, and other home appliances) that support one or more common ecosystems, and can be controlled via devices associated with that ecosystem, such as smart phones and smart speakers. Other Example : Alexa, Google Home, Smart watches like Apple watch etc. There are a number of serious concerns about dangers in the growth of IoT, especially in the areas of privacy and security.</p> |
| Q3 | Define Mobile processor. |
| Ans | <p>A mobile processor is found in mobile computers and cell phones (smart phones). It is the brain of mobile devices. Mobile CPU receives commands, makes instant calculations, play audio/video, store information and sends signals throughout the device. A CPU chip is typically housed in a smaller chip package, but more importantly, in order to run cooler, it uses lower voltages than its desktop counterpart and has more sleep mode capability.</p> |
| Q4 | What are the symptoms of virus infection in computer? |

| | |
|-----------|--|
| Ans | <ul style="list-style-type: none"> • If you observe that your system takes longer time to load applications • shows unpredictable program behaviour • shows unexpected changes in file sizes • has inability to boot, • has strange graphics appearing on your screen <p>This could be because of your computer being infected by a virus.</p> |
| Q5 | What is Virus? Write its types. |
| Ans | <p>Virus is a malicious program that attaches itself to the host program. It is designed to infect the host program and gain control over the system without the owner's knowledge. The virus gets executed each time the host program is executed. Also it has the tendency to replicate. They can spread through external media such as CDs, browsing infected internet sites and from email attachments</p> <p>Types of virus are:</p> <ul style="list-style-type: none"> • <u>File Virus</u>: These viruses infect and replicate when it gets attached to MS-DOS program files with EXE or COM extensions. • <u>Boot sector virus</u>: These viruses infect the boot sector of floppy disks or hard drives. Boot sector of a drive contains program that participates in booting the system. A virus can infect the system by replacing or attaching itself to these programs • <u>Macro virus</u>: These viruses infect and replicate using the MS Office program suite, mainly MS Word and MS Excel. The virus inserts unwanted words or phrases in the document. |
| Q6 | Compare 3G,4G and 5G mobile technologies? (do yourself) in brief. |