

BITT POLYTECHNIC

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Subject – Fundamentals of computer

Branch – All

25 questions and answer set:

Q1. What are the main parts of IoT systems?

Answer: IoT system consists of three main parts:

- i) Sensors
- ii) Network connectivity
- iii) Data storage applications.

Q2. What are security concerns related to IoT?

Answer: Data security and privacy are major concerns related to IoT. These devices are vulnerable to hacking and cloud endpoints could be used by hackers to attack servers. Software developers and device designers have to ensure adequate security and privacy measures.

Q3. Explain the IoT protocol stack.

Answer: IoT has 4 protocol layers:

1. **Sensing and information:** Includes various smart sensor devices based on GPS, RFID, Wi-Fi, etc.
2. **Network connectivity:** Layer is based on a wired and wireless network such as WLAN, WMAN, Ethernet, optical fiber and more.
3. **Information processing layer**
4. **Application layer**

Q4. Explain the basic architecture of the IoT network.

Answer:

IoT has three main parts namely sensors, network connectivity and data storage applications. Sensors either communicate directly with the central server for data storage or communicate via gateway devices. A gateway can handle various wireless interfaces that's why one gateway can handle multiple technologies and multiple sensors. The typical wireless technologies used widely are Zigbee, Zwave, RFID, NFC etc. gateway interfaces with the cloud using wireless or wired technologies such as Wi-Fi, Mobile or Fiber, DSL.

The IoT hardware system can be constructed using Micro-Controller Units. Choice of Micro-controller depends on the system on chip resources, the power required and interfaces needed as per different sensors and memory requirements.

Q5. What is the main difference between a mainframe and a super computer?

Ans: Supercomputers are focused to execute few programs as fast as possible while mainframe uses its power to execute as many.

Q6. ASCII and EBCDIC are the popular character coding systems. What does EBCDIC stand for?

Ans: Extended Binary Coded Decimal Interchange Code

Q7. Storage capacity of magnetic disk depends on

- Ans:**
- a) tracks per inch of surface
 - b) bits per inch of tracks
 - c) disk pack in disk surface

Q8. A storage area used to store data to a compensate for the difference in speed at which the different units can handle data is

Ans: BUFFER

Q 9. A hybrid computer

Ans: Resembles both a digital and analogue computer.

Q10. MSI stands for

- a. Medium Scale Integrated Circuits **(answer)**
- b. Medium System Integrated Circuits
- c. Medium Scale Intelligent Circuit
- d. Medium System Intelligent Circuit

11. The capacity of 3.5 inch floppy disk is

- a. 1.40 MB
- b. 1.44 GB
- c. 1.40 GB
- d. 1.44 MB **(answer)**

12. MICR stands for

- a. Magnetic Ink Character Reader **(answer)**
- b. Magnetic Ink Code Reader
- c. Magnetic Ink Cases Reader
- d. None

13. CAD stands for

- a. Computer-aided design **(Answer)**
- b. Computer algorithm for design
- c. Computer application in design
- d. Computer analogue design

14. Junk e-mail is also called

- a. spam **(Answer)**
- b. spoof
- c. sniffer script
- d. spool

15. Hackers

- a. all have the same motive
- b. break into other people's computers (**answer**)
- c. may legally break into computers as long as they do not do any damaged. are people who are allergic to computers

16. What type of computers are client computers (most of the time) in a client-server system?

- a. Mainframe
- b. Mini-computer
- c. Microcomputer (**answer**)
- d. PDA

17. A computer cannot 'boot' if it does not have the

- a. Compiler
- b. Loader
- c. Operating System (**answer**)
- d. Assembler

18. The amount of vertical space between lines of text in a document is called

- a. double-space
- b. line spacing (**answer**)
- c. single-space
- d. vertical spacing

19. Example of non-numeric data is

- a. Employee address (**answer**)
- b. Examination score
- c. Bank balance
- d. All of these

20. What is embedded system?

- a. The programme which arrives by being wrapped in box.
- b. The programme which is the permanent part of the computer
- c. The computer which is the part of a big computer
- d. The computer and software system that control the machine (**answer**)

21. Is the appearance of typed characters?

- a. Size
- b. Format (**answer**)
- c. Point
- d. Colour

22. When a file is saved for the first time

- a copy is automatically printed
- b. it must be given a name to identify it (**answer**)
- c. it does not need a name
- d. it only needs a name if it is not going to be printed

23. represents raw facts, where-as..... is data made meaningful.

- a. Information, reporting
- b. Data, information (**answer**)
- c. Information, bits
- d. Records, bytes

24. What are some of the common lists that can be used when designing a page?

You can insert any or a combination of the following list types:

- ordered list
- unordered list
- definition list
- menu list

– directory list

Each of these list types makes use of a different tag set to compose

25. How do you create links to sections within the same page?

Links can be created using the `<a>` tag, with referencing through the use of the number (#) symbol. For example, you can have one line as `BACK TO TOP`, which would result in the words "BACK TO TOP" appearing on the webpage and links to a bookmark named topmost. You then create a separate tag command like `` somewhere on the top of the same webpage so that the user will be linked to that spot when he clicked on "BACK TO TOP".