INDIAN INSTITUTE OF INFORMATION TECHNOLOGY KOTTAYAM
Department of Computer Science and Engineering

FIRST MID SEMESTER EXAMINATION - DEC, 2022

COURSE TITLE: ICS111 IT Workshop I

Date & Time:17-12-2022 & 2:30 PM to 4 PM **Max. Marks: 50**

Course Instructor: Dr P Victer Paul, Dr Goutam Mali, Dr Nandini **Batch: 1, 2 and 3**

Answer all Questions

SECTION – A **[10x1=10]**

1. Which one of the following is not an internal component of the CPU?
   a. Arithmetic unit b. Logic unit c. Interface unit d. Control unit

2. Cache memory is used to transfer data between:
   a. Main memory and secondary memory
   b. Processor and an input device
   c. Main memory and processor
   d. Processor and an output device

3. Which one of the following hardware components is normally used to accommodate secondary cache?
   a. Motherboard b. Processor c. RAM d. Any secondary storage device

4. What is the purpose of the memory address register?
   a. Stores the address of the next location in the main memory
   b. Stores the address of the next location in the secondary memory
   c. Stores the address of the next location in the cache memory
   d. Stores the address of an output device to which the data is to be sent

5. Which of the following memory is the fastest type of memory?
   a. Secondary memory b. Primary memory
   c. Cache memory d. ROM

6. A device driver acts as an interface between:
   a. End-user and I/O device
   b. Application software and I/O device
   c. Application software and operating system
   d. Operating system and I/O device

7. A network that is restricted to use by a single organisation is referred to as:
   a. LAN b. WAN c. Internet d. Intranet

8. WWW follow _____ architecture
   a. client server b. peer to peer c. 3 – tier d. Wireless

9. During the booting process, the CPU looks to _____ for the first instruction in the start-up program.
   a. ROM BIOS b. RAM BIOS c. SRAM d. Cache

10. The process of restarting a computer
   a. Warm boot b. Cold boot c. Hard Boot d. None of the above

SECTION - B [4x5=20]

1. Demonstrate the sequence of operations performed by the PC before the user is given access to the system's applications.

2. Demonstrate at least ten directory and file manipulation MSDOS/Linux commands with examples.

3. Propose different factors to classify the computer networks and discuss various types of them using each identified factor.

4. How a computer can be identified uniquely over the internet and discuss its different representations with limitations.

SECTION - C [2x10=20]

1.

a. Describe the memory hierarchy in computers.
b. Compare the memory hierarchy based on
   i. What they are made of
   ii. Access latency
   iii. Cost
   iv. Size. (5+5)

2.

a. List and describe the different ways in which the computer can be wired in the network.
b. Compare them based on the hop count analysis/ number of steps taken to reach from any one node to any other node in the network. (6+4)

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