Okay, here are 5 Multiple Choice Questions (MCQs) based on the provided text, following your specified format:

1

Question: Which of the following is NOT a type of computer mentioned in the introduction?

A) Embedded computers

B) Personal computers

C) Mainframe computers

D) Supercomputers

Correct Answer: C) Mainframe computers

2

Question: What is the primary function of the Instruction Register (IR)?

A) To store the address of the next instruction.

B) To temporarily hold data being transferred to/from memory.

C) To decode the fetched instruction.

D) To perform arithmetic and logical operations.

Correct Answer: C) To decode the fetched instruction.

3

Question: In a three-address instruction format, what does each address field specify?

A) Only a memory address.

B) Only a processor register.

C) Either a register or an operand.

D) Only the operation code.

Correct Answer: C) Either a register or an operand.

4

Question: Which cache mapping technique has the largest tag size?

A) Direct Mapping

B) Set Associative Mapping

C) Fully Associative Mapping

D) K-way Set Associative Mapping

Correct Answer: C) Fully Associative Mapping


5

Question: What is the main advantage of using Direct Memory Access (DMA) for data transfer?

A) It simplifies the I/O interface design.

B) It reduces the amount of memory required by the system.

C) It frees the CPU from high-volume data transfers.

D) It eliminates the need for interrupts.

Correct Answer: C) It frees the CPU from high-volume data transfers.