✓ Replacement algorithms used in associative and set-associative mapping of cache memory are: * 1/1

- ○ LFU
- ○ LRU
- ○ FIFO
- ◉ All of the above ✓

✗ Cache Memory is implemented using the DRAM chips. * 0/1

- ◉ TRUE ✗
- ○ FALSE

Correct answer

- ◉ FALSE

✓ LRU stands for _____ * 1/1

- ○ Low Rate Usage
- ○ Least Rate Usage
- ◉ Least Recently Used ✓
- ○ Low Required Usage

✗ When the data at a location in cache is different from the data located in the main memory, the cache is called _____ * 0/1

- ○ Unique
- ○ Inconsistent
- ○ Variable
- ◉ Fault ✗
- ○ Other:

Correct answer

- ◉ Inconsistent

✓ Which of the following is not a write policy to avoid Cache Coherence? * 1/1

- ○ Write through
- ◉ Write within ✓
- ○ Write back
- ○ Buffered write

✓ The instruction, “INC” increases the contents of the specified register or memory location by..... * 1/1

- 0
- 1 ✓
- 2
- 3

✓ The instruction that enables subtraction with borrow is..... * 1/1

- DEC
- SUB
- SBB ✓
- ADC

✓ In general, the source operand of an instruction can be..... * 1/1

- memory location
- register
- immediate data
- All of these ✓

✓ In general, the destination operand of an instruction can be..... * 1/1

- memory location
- register
- immediate data
- memory location and register ✓

✓ The instruction, CMP to compare source and destination operands, it performs..... * 1/1

- addition
- subtraction ✓
- division
- multiplication

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✓ In Direct Mapping of a cache the relation holds good is: * 1/1

- ○ i = j modulo k
- ◉ i = j modulo m ✓

✗ The processor used in a smartphone is an example of: * 0/1

- ○ Dedicated Processor
- ○ Application Processor
- ○ Tiny Processor
- ◉ Multiprocessor ✗

Correct answer

- ◉ Application Processor

✓ ARM chips are: * 1/1

- ○ High speed processors and require more power
- ◉ High speed processors and require less power ✓
- ○ Low speed processors and require less power
- ○ Low speed processors and require more power

✓ The first microprocessor to be launched was: * 1/1

- 8008
- 8080
- 4004 ✓
- 4040

✗ Intel's first 32-bit machine was: * 0/1

- 8086
- 80286 ✗
- 80386
- Pentium

Correct answer

- 80386

✗ The processor used in a smartphone is an example of: * 0/1

✓ The main structural components of a computer are: * 1/1

- ○ CPU, VDU, Main Memory, Secondary Memory
- ◉ CPU, I/O, Main Memory, System Interconnections ✓
- ○ CPU, Keyboard, Mouse, Printer
- ○ CPU, CU, ALU, I/O

✓ The Von Neumann architecture consists of: * 1/1

- ○ Main Memory, System interconnections, Speakers, Monitor
- ○ Main Memory, Display Unit, Circuit Board, Power Supply
- ◉ Main Memory, ALU, CU, I/O, System Interconnections ✓
- ○ Main Memory, CPU, Secondary Memory, Speakers

✓ If the offset of the operand is stored in one of the index registers, then it is known as __ * 1/1

- ○ base index addressing mode
- ◉ indexed addressing mode ✓
- ○ relative base indexed addressing mode
- ○ none of these

✓ The microprocessor can read/write 16-bit data from or to ___ * 1/1

- ◉ Memory ✓
- ○ I/O devices
- ○ Processor
- ○ None of these

✓ During read operation, CPU fetches _____ * 1/1

- ○ Data
- ○ Instruction
- ○ another address
- ◉ all of the above ✓

✓ If the base address of stack segment in 8086 is 4FFF0H, the value in SS register is ..... * 1/1

- ○ 8FFFH
- ◉ 4FFEH ✓
- ○ 5FFEH
- ○ 4FFFH

be..... *

- memory location
- register
- immediate data ✗
- memory location and register

Correct answer

- memory location and register

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✓ An example of non-erasable memory is: * 1/1

- ○ RAM
- ◉ ROM ✓
- ○ CACHE
- ○ MAIN MEMORY

✓ Storage which stores or retains data after power off is called__ * 1/1

- ○ Volatile storage
- ◉ Non-volatile storage ✓
- ○ Sequential Storage
- ○ Direct storage

✓ Which of the following is independent of the address bus? * 1/1

- (●) Secondary memory ✓
- ( ) Main memory
- ( ) Cache memory
- ( ) None of these

✓ An example of non-erasable memory is: * 1/1

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- (●) ROM ✓
- ( ) CACHE
- ( ) MAIN MEMORY

✓ Storage which stores or retains data after power off is called__ * 1/1

✓ RAID stands for..... * 1/1

- (●) Redundant Array of Independent Disks ✓
- ( ) Reduced Array of Independent Disks
- ( ) Redundant Array of Independent Devices
- ( ) IR Redundant Array of Interleaved Disks

✓ RAID increases the mean time to failure. * 1/1

- (●) TRUE ✓
- ( ) FALSE

✓ Which of the following is independent of the address bus? * 1/1

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- ◉ i = j modulo m ✓
- ○ i = j modulo v
- ○ i = j modulo w

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✓ For a hamming code of parity bit m=8, what is the total bits and data bits? * 1/1

- ◉ (255, 247) ✓
- ○ (127, 119)
- ○ (31, 26)
- ○ (0, 8)

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