1. The key factor/s in commercial success of a computer is/are \_\_\_\_\_\_\_\_

a) Performance

b) Cost

c) Speed

d) Both Performance and Cost

Answer: d

Explanation: The performance and cost of the computer system is a key decider in the commercial success of the system.

2. The main objective of the computer system is \_\_\_\_\_\_\_\_

a) To provide optimal power operation

b) To provide the best performance at low cost

c) To provide speedy operation at low power consumption

d) All of the mentioned

Answer: b

Explanation: An optimal system provides the best performance at low costs.

3. A common measure of performance is \_\_\_\_\_\_\_\_

a) Price/performance ratio

b) Performance/price ratio

c) Operation/price ratio

d) None of the mentioned

Answer: a

Explanation: If this measure is less than one then the system is optimal.

4. The performance depends on \_\_\_\_\_\_\_\_

a) The speed of execution only

b) The speed of fetch and execution

c) The speed of fetch only

d) The hardware of the system only

Answer: b

Explanation: The performance of a system is decided by how quick an instruction is brought into the system and executed.

5. The main purpose of having memory hierarchy is to \_\_\_\_\_\_\_\_

a) Reduce access time

b) Provide large capacity

c) Reduce propagation time

d) Reduce access time & Provide large capacity

Answer: d

Explanation: By using the memory Hierarchy, we can increase the performance of the system.

6. The memory transfers between two variable speed devices are always done at the speed of the faster device.

a) True

b) False

Answer: a

Explanation: None.

7. An effective to introduce parallelism in memory access is by \_\_\_\_\_\_\_

a) Memory interleaving

b) TLB

c) Pages

d) Frames

Answer: a

Explanation: Interleaving divides the memory into modules.

8. The performance of the system is greatly influenced by increasing the level 1 cache.

a) True

b) False

Answer: a

Explanation: This is so because the L1 cache is onboard the processor.

9. Two processors A and B have clock frequencies of 700 Mhz and 900 Mhz respectively. Suppose A can execute an instruction with an average of 3 steps and B can execute with an average of 5 steps. For the execution of the same instruction which processor is faster.

a) A

b) B

c) Both take the same time

d) Insufficient information

Answer: a

Explanation: None.

10. If the instruction Add R1, R2, R3 is executed in a system which is pipelined, then the value of S is (Where S is a term of the Basic performance equation).

a) 3

b) ~2

c) ~1

d) 6

Answer: c

Explanation: Pipelining is a process of fetching an instruction during the execution of other instruction.