18 Lecture - CS501

Important Mcqs

1. **What is pipelining?**
   a) A technique to increase the size of memory
   b) A technique to increase the processing speed of a CPU
   c) A technique to increase the number of input/output devices
   Answer: b) A technique to increase the processing speed of a CPU

   What is the purpose of pipelining?
   a) To decrease the processing speed of a CPU
   b) To increase the processing speed of a CPU
   c) To increase the size of the memory
   Answer: b) To increase the processing speed of a CPU

   Which of the following is a benefit of pipelining?
   a) Decreased throughput
   b) Increased idle time
   c) Increased efficiency
   Answer: c) Increased efficiency

   What is a pipeline stage?
   a) A specific step in the pipelining process
   b) A specific step in the memory access process
   c) A specific step in the input/output process
   Answer: a) A specific step in the pipelining process

   How does pipelining work?
   a) By dividing the processing of an instruction into smaller sequential stages
   b) By increasing the size of the memory
   c) By increasing the number of input/output devices
   Answer: a) By dividing the processing of an instruction into smaller sequential stages

   What is the output of one stage in the pipeline used for?
   a) As the input for the next stage
   b) To increase the size of the memory
   c) To increase the number of input/output devices
   Answer: a) As the input for the next stage

   What is a pipeline hazard?
   a) A delay in the pipeline caused by an instruction that depends on a previous instruction
   b) A delay in the pipeline caused by a hardware failure
   c) A delay in the pipeline caused by a software error
   Answer: a) A delay in the pipeline caused by an instruction that depends on a previous instruction

   What is a pipeline stall?
   a) A delay in the pipeline caused by a hardware failure

b) A delay in the pipeline caused by a software error
c) A delay in the pipeline caused by the pipeline hazard
Answer: c) A delay in the pipeline caused by the pipeline hazard

Which of the following is a disadvantage of pipelining?
a) Increased efficiency
b) Increased complexity
c) Decreased throughput
Answer: b) Increased complexity

What is the main goal of pipelining?
a) To decrease the processing speed of a CPU
b) To increase the processing speed of a CPU
c) To decrease the number of input/output devices
Answer: b) To increase the processing speed of a CPU