注意事項：

1. 本試題共 6 題，配分共 100 分。
2. 請標明大題、子題編號作答，不必抄題。
3. 全部答案均須在答案卷之答案欄內作答，否則不予計分。

(40%) 1. Explain the following terms
 (8%) (a).　Unicode
 (8%) (b).　DMA
 (8%) (c).　Instruction pipeline
 (8%) (d).　GUI
 (8%) (e).　Cloud computing

(10%) 2. What is the largest positive integer that can be represented in a two's complement system in which each value is represented by eight bits?

(10%) 3. Describe how a computer can produce an incorrect answer when performing numerical computations even though it has not malfunctioned.

(10%) 4. Describe the machine cycle.

(20%) 5. Explain the concept of throughput and techniques by which throughput is increased.

(10%) 6. What are two protocols for implementing the transport level in the "TCP/IP hierarchy"?