簡答題

1. Please explain three aspects of the access time of a hard disk. In other words, what factors can be decisive to measure the access time of a hard disk? (15%)

2. Please describe how virtual storage or virtual memory works (use the concept of paging)? (15%)

3. Please discuss how encryption works based on the use of private and public key encryptions techniques? (15%)

4. Based on I-time and E-time concepts, please explain the steps and details in a machine cycle. (15%)

5. Please differentiate these terms: Register, Random-Access Memory (RAM), and Cache. Use diagrams to explain them if it is necessary. (20%)

6. Please draw a diagram showing how the single and dual core processors work. Besides the number of cores, what are other factors that determine processing power of a CPU? (20%)