Total 100 points

1. (10%) What functional units are included in a computer system based on Von Neumann architecture?

2. (10%) Compare sequential access and random access.

3. (10%) What components are included in a central processing unit (CPU)?

4. (10%) Describe disadvantages when we use arrays to store data.

5. (10%) List three main principles of objected-oriented programming.

6. (10%) What is a time-sharing system?

7. (10%) List deadlock necessary conditions in operating systems.

8. (10%) Compare high-level languages and low-level languages.

9. (10%) What is indirect recursion? Please also give an example.

10. (10%) What are essential attributes of good software?