東吳大學 115 學年度碩士班招生考試試題

系級	資訊管理學系碩士班	考試時間	100 分鐘
科目	計算機概論	本科總分	100 分

※一律作答於答案卷上(題上作答不予計分)；並務必標明題號，依序作答。

一、選擇題(每題 4 分，共 40 分)

1. Which of the following is responsible for translating source code into object code?
A. Interpreter
B. Compiler
C. Operating System
D. Loader

2. Which memory type is fastest in accessing data?
A. Cache memory
B. Main memory (RAM)
C. CPU registers
D. Secondary storage

3. Which device is primarily used for long-term data storage?
A. Cache memory
B. RAM
C. CPU register
D. Hard disk drive

4. In the OSI model, which layer is responsible for reliable end-to-end communication?
A. Network layer
B. Transport layer
C. Session layer
D. Application layer

5. Which of the following is an example of Infrastructure as a Service (IaaS)?
A. Using Google Docs online
B. Renting virtual machines from AWS
C. Developing applications on Heroku
D. Using Microsoft Outlook

6. Which data structure follows the First-In-First-Out (FIFO) principle?
A. Stack
B. Tree
C. Queue
D. Graph

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7. Which of the following attacks involves repeatedly guessing passwords until the correct one is found?

A. Phishing
B. Man-in-the-middle
C. Brute-force attack
D. Trojan attack

8. Which network topology uses a central device to connect all other devices?

A. Ring
B. Mesh
C. Bus
D. Star

9. Which of the following is a characteristic of SSD storage?

A. Uses magnetic disks
B. Contains moving parts
C. Faster access time than HDD
D. Lower cost per GB than HDD

10. Which component of the CPU directs the operation of the processor?

A. Arithmetic Logic Unit (ALU)
B. Register
C. Control Unit
D. Cache

二、簡答題(每題 15 分，共 60 分，可中文或英文作答)

1. What is the difference between a program and a process?

2. Compare TCP and UDP in terms of reliability, speed, and typical applications.

3. Convert the decimal number 88 into an 8-bit binary number.

4. Explain the difference between machine learning and deep learning, and give one application example for each.