

※ 注意：請於試卷內之「非選擇題作答區」標明題號依序作答。

1. Which of the following components stores firmware and is non-volatile? (6%)  
A. RAM; B. Cache; C. ROM; D. Register
2. Which unit of the CPU is responsible for performing arithmetic and logical operations? (6%)  
A. Control Unit; B. Arithmetic Logic Unit (ALU); C. Cache Controller; D. System Bus
3. Which storage device generally provides the largest capacity but slowest access speed? (6%)  
A. Cache memory; B. RAM; C. SSD; D. Hard Disk Drive (HDD)
4. In a stack data structure, which operation removes the top element? (6%)  
A. Push; B. Pop; C. Peek; D. Insert
5. HTTPS is an extension of HTTP that provides encrypted communication. True or False? (6%)
6. Using a strong password alone is sufficient to fully secure an online account. True or False? (6%)
7. The protocol primarily used to retrieve emails from a mail server is \_\_\_\_\_. (6%)
8. The process of converting source code into machine code is called \_\_\_\_\_. (6%)
9. Explain the difference between primary storage and secondary storage. (6%)
10. What is the main purpose of virtual memory in an operating system? (6%)
11. Match the following technologies with their primary functions (Answer format example: 1-A, 2-B, 3-C, 4-D) (12%)

1. Cloud Computing	A. Protecting data confidentiality
2. Internet of Things (IoT)	B. Devices communicating and collecting data via the internet
3. Machine Learning	C. On-demand computing resources over the internet
4. Encryption	D. Systems that learn patterns from data
12. Discuss the role of Cloud Computing in modern information systems. Provide one real-world example. (14%)
13. What are the potential ethical and social issues related to the widespread use of big data technologies? (14%)

試題隨卷繳回