

科目：資訊管理概論(含計算機概論)

系所組：資訊管理學系碩士班

一、單選題 (每題 5 分, 50%)

1. Among the options listed, which component is not considered part of the IT infrastructure ecosystem within firms? (A) Internet platforms (B) Operating system platforms (C) Enterprise software applications (D) Virtual reality systems
2. What category of Database Management Systems (DBMS) technology organizes data into two-dimensional tables? (A) mobile DBMS (B) relational DBMS (C) hierarchical DBMS (D) object-oriented DBMS
3. The tool employed for analyzing extensive unstructured datasets, such as emails, memos, and survey responses, to uncover patterns and relationships is (A) OLAP (Online analytical processing) (B) Classification (C) Clustering (D) Text mining
4. What technology automatically retrieves content from websites and delivers it to users' computers? (A) FTP (B) RSS (C) HTTP (D) Bluetooth
5. An attack that involves utilizing multiple computers to inundate and overwhelm the network from various launch points is known as (A) Distributed Denial-of-Service (DDoS) (B) Denial-of-Service (DoS) (C) SQL injection (D) phishing (E) botnet
6. What planning tool displays each task as a horizontal bar, with its length proportional to the time required for completion? (A) Gantt chart (B) PERT (Program Evaluation Review Technique) chart (C) Scoring model (D) Portfolio analysis
7. In relation to initiatives addressing sustainable development, which statement is incorrect? (A) Greenwashing (漂綠) is an activity worthy of encouragement. (B) The United Nations introduced 17 Sustainable Development Goals (SDGs) in 2015. (C) The phased implementation of the Carbon Border Adjustment Mechanism (CBAM) by the European Union began in October 2023. (D) The United States introduced the draft of the Clean Competition Act (CCA) in 2022.
8. What system would you employ to oversee relationships with your customers? (A) CRM (Customer Relationship Management) (B) MIS (Management Information System) (C) SCM (Supply Chain Management) (D) KMS (Knowledge Management System)
9. Which of the following statements about 5G is true? (A) 5G will be capable of transmitting data in the gigabit range. (B) 5G will transmit data in the megabyte range. (C) 5G is constructed on the foundation of 4G networks. (D) 5G will have longer transmission delays.
10. What output does the following Python code produce? (A) 9.650 (B) 9.65 (C) 9.66 (D) 9.7
A = 9.65
print ("%3f" % (A))

※ 注意：1.考生須在「彌封答案卷」上作答。

2.本試題紙空白部份可當稿紙使用，試題須隨答案卷繳回。

3.考生於作答時可否使用計算機、法典、字典或其他資料或工具，以簡章之規定為準。

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二、簡答題 (請任選 2 題作答即可，30%)

1. 試比較企業經營 B2C 與 C2B 電子商務的異同之處？(15%)
2. 請簡單說明深度學習 (Deep Learning) 和類神經網路 (Artificial Neural Network)，並比較兩者之間的關係。(15%)
3. 請依據下表「程式需求」，自「Python 程式」找出至少 2 個錯誤並改寫。(15%)

Python 程式	程式需求
<pre>input(x,y) bmi=x/(y**2*0.0001) if bmi>=28: print("BMI%f 體重肥胖" %bmi) else: print("BMI%f 體重不肥胖" %bmi)</pre>	<ol style="list-style-type: none"> 1. 輸入 <ol style="list-style-type: none"> (1) 請使用者輸入體重(公斤) (2) 請使用者輸入身高(公分) 2. 處理: 計算 BMI <p>BMI = 體重(公斤) / 身高(平方公尺)</p> <p>例如：一個 52 公斤的人，身高是 155 公分，則 BMI 為: $52 / 1.55^2 = 21.6$</p> 3. 輸出 <ol style="list-style-type: none"> (1) BMI \geq 28, 輸出 “BMI = (你算出的 BMI 數值) 體重肥胖” (2) 否則，輸出 “BMI = (你算出的 BMI 數值) 體重不肥胖”

三、申論題 (20%)

隨著網路技術和 AI (Artificial Intelligence) 快速發展，大幅度減少資訊搜尋成本，使我們能夠非常容易地獲取大量資訊，但這也帶來了新的挑戰和機會，即如何有效地管理、評估，甚至是操弄這些巨量資訊。資訊科技可以突破時間 (流通速度) 和空間局限 (全球化)，讓過去不可能的做到的事變為可能，也能讓一個產業或企業，瞬間從優勢變成劣勢。

對於即將成為資訊管理學系的研究生，您認為資訊管理領域應該朝著什麼方向發展？請嘗試提出一個可能的研究議題和預期效益。

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2. 本試題紙空白部份可當稿紙使用，試題須隨答案卷繳回。

3. 考生於作答時可否使用計算機、法典、字典或其他資料或工具，以簡章之規定為準。