國立成功大學

112學年度碩士班招生考試試題

編　號：238

系　所：資訊管理研究所

科　目：管理資訊系統

日　期：0207

節　次：第 3 節

備　註：不可使用計算機

※ 考生請注意：本試題不可使用計算機。　請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

A1: BCC (8%)

One of your friends has a project which needs to handle a 4G size file, so he decides to buy new computer hardware equipped with 16G main memory, and 1T SSD secondary storage. He has a licensed 32-bit MS-Windows™ at hand which is workable for the new hardware. He, therefore, decides to spend no money to purchase a new version operation system. If he asks for your comments, please write down your suggestions for such a purchase plan. (8 %)

A2: Database (11%)

In enterprises, the relational database is the most commonly used DBMS at present. To ensure that the transaction is correct and reliable, it must have the four characteristics name ACID, please explain what ACID are. (8%) One new product of database named NoSQL, please discuss the difference between relational database & NoSQL from the perspective of ACID. (3%)

A3: Network (20%)

Networks become an important connection media to support our life. In today's "Digital-First" era, the establishment of digital trust is one of the most important keys in the process of enterprise transformation, please explain in detail what "zero trust." is (5%) Please discuss the difference in your words regarding "Intranet" and "Private cloud" (6%) In Cloud computing, there are at least three basic services are offered. Please name, explain and give one example of the services (9%)

A4: AI (11%)

Artificial Intelligent become a hot topic, and several terms are defined for AI, please explain in detail what are"AIoT", "Explainable AI (XAI)" and "Artificial General Intelligence (AGI)." (6%) Assume you are a product designer, if you want to develop an AIoT product for your living room, please list one product and explain why and how it is an AIoT product. (5%)

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Part B.

B1、 Which of the following types of artificial intelligence is capable of creating new content, such as text, music, or images? (2%)

A) Generative AI

B) Rule-based AI

C) Reactive AI

D) Hybrid AI

B2、 Which of the following terms refers to digital representations of physical objects or systems that can be used for simulation, analysis, and optimization? (2%)

A) Virtual twins

B) Digital models

C) Virtual models

D) Digital twins

B3、 Which one of the following tasks ChatGPT might not be capable of performing? (2%)

A) Reporting weather.

B) Writing an essay.

C) Revising a sentence.

D) Telling a story

B4、 What are the differences between strong and weak AI? (8%)

B5、 What is GameFi and how does it rely on information technology (IT) to function? (10%)

B6、 What is hybrid work? (3%) Why enterprises should consider hybrid work? (10%)

B7、 What is ESG? (3%) What are the potential synergies between ESG and Fintech for enterprises? (10%)