

問答題四題，每題 25 分。

1. Please answer the following questions regarding information technology (IT).
  - a. Define IT infrastructure from both a technology and a services perspective.
  - b. List and describe the components of IT infrastructure that a firm needs to manage.
  - c. Describe how network economics, declining communication costs, and technology standards affect IT infrastructure.
2. Please answer the following questions regarding business decision making.
  - a. List each of the major decision-making constituencies in an organization and describe the types of decision each makes.
  - b. Describe how management information systems (MIS), decision support systems (DSS), or executive support systems (ESS) provide decision support for each of these groups.
  - c. Explain how a group decision support system (GDSS) works and how it provides value for a business.
3. Please answer the following questions regarding systems development.
  - a. Define information requirements and explain why they are difficult to determine correctly.
  - b. Explain why the testing stage of systems development is so important. Name and describe the stages of testing for an information system.
  - c. Define rapid application development (RAD) and agile development and explain how they can speed up system building.
4. Please answer the following questions regarding intelligent techniques for knowledge management.
  - a. Define case-based reasoning and explain how it different from an expert system.
  - b. Define a neural network, and describe how it works and how it benefits business.
  - c. Define and describe fuzzy logic, genetic algorithms, and intelligent agents. Explain how each works and the kinds of problems for which each is suited.