Candidates should complete **one** of the following project assignments.   Candidates may develop a prototype of the application in the project assignment to demonstrate the design.

Title 1: e-Classroom System for Supporting Teaching and Learning

- Candidates are required to design an e-Classroom system for a school to support teaching and learning.
- Candidates should propose
  - the functions of the system for supporting teaching and learning (e.g. online polling and multiple-choice testing)
  - the hardware and software required
  - the network design
  - the underlying database design for the suggested functions (e.g. online polling)
- Candidates should analyse the feasibility of implementing the proposed system.

Title 2: Instant Messaging System

Instant Messaging System (IMS) is a real-time communications system that makes communication via a network easier.

- Candidates are required to investigate and compare two different network models, the client-server model and the peer-to-peer model, in implementing an IMS on a network.
- Candidates are required to design an IMS for a school so as to facilitate communication between teachers and students.
- Candidates should propose
  - the functions of the IMS for facilitating communication (e.g. instant messaging and file transfer)
  - the network design for data flow
  - the system requirements
  - a database schema to support the proposed function(s) (e.g. history of messages and contact list)
- Candidates should analyse the feasibility of implementing the proposed system.

END OF PAPER

考生須完成下列**其中一道**習作題目。　考生可開發習作報告內一個原型應用系統，以展示其設計。

第一題：支援教學的電子教室系統

- 考生需爲學校設計一個支援教學的電子教室系統。
- 考生須提出
  - 此系統內支援教學的功能（例如在線投票區及多項選擇題測驗）
  - 所需硬件及軟件
  - 網絡設計
  - 有關功能（例如在線投票區）的基本數據庫設計
- 考生須分析實現這個系統的可行性。

第二題：即時信息系統

即時信息系統是一個實時通訊系統，促進在網絡上人與人之間的溝通。

- 考生需探究及比較以客戶機／伺服器網絡及對等網絡這兩種不同網絡模式在網絡中建構一個即時信息系統。
- 考生需爲學校設計一個即時信息系統，以促進老師和學生之間的溝通。
- 考生須提出
  - 此系統內促進溝通的功能（例如即時信息及檔案傳輸）
  - 數據流程的網絡設計
  - 系統要求
  - 支援某一項（多項）功能（例如信息記錄及連絡人地址）的數據庫模式（database schema）
- 考生須分析實現這個系統的可行性。

試卷完