



**Section A**

Attempt **all** the questions in this section.

1 (a) Describe the following stages of the systems life cycle.

(i) Investigation and analysis

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..... [2]

(ii) Design

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(b) Describe rapid application development (RAD).

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..... [2]

(c) State **two** methods used for installing a new computer-based information system.

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..... [2]

2 (a) Identify **three** characteristics of a wide area network (WAN).

Characteristic 1 .....

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Characteristic 2 .....

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Characteristic 3 .....

..... [3]

(b) Describe a single-user operating system.

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(c) Describe **two disadvantages** of using a peer-to-peer network in a school.

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3 State **two** purposes for each of the following network components:

(a) Switch

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(b) Network interface card

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..... [2]

(c) Repeater

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6 Describe **two** advantages for a network manager of joining a professional body such as the British Computer Society (BCS).

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**Section B**

Attempt **all** the questions in this section.

**Questions 7-12 concern an airline company which specialises in journeys to Europe.**

The management of the airline needs to update the check-in system to deal with passengers more efficiently. They have employed a consultancy firm to investigate the current system and design the updates.

7 (a) Describe the role and responsibilities of a project manager.

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(b) Describe **three** different methods a systems analyst might use when investigating the current system.

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9 (a) At check-in, passengers are asked for details which are entered on screen by an airline employee.

(i) Describe a mental model.

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(ii) Describe how a mental model can be applied to the design of a user interface.

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(c) (i) Compare the use of command line and forms as methods of dialogue that the employees might use to interact with the check-in system.

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(ii) Describe **one disadvantage** of using speech as a method of input for the check-in system.

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(iii) Give **one** other method of dialogue that could be used to interact with the check-in system.

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(d) Describe how data entered onto the system can be kept confidential.

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