Rewarding Learning

ADVANCED
General Certificate of Education
January 2011

Information and Communication Technology

Assessment Unit A2 1

assessing

Module 3: Information Systems

[AW211]

AW211

WEDNESDAY 26 JANUARY, AFTERNOON

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.
Write your answers in the spaces provided in this question paper.
Answer **all seven** questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 120 including a maximum of 5 for quality of written communication.
Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

6533

1 The users of a new information system are provided with an interactive DVD for use during training.

(a) Describe **two** features of an interactive DVD which make it suitable for training.

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2. _____

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_____ [6]

(b) Documentation is produced during the development of the new system.

(i) Identify **four** sections contained in user documentation.

1. _____

2. _____

3. _____

4. _____ [4]

(ii) Describe **two** ways in which technical documentation can be used during software maintenance.

1. _____

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2. _____

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_____ [6]

3

[Turn over

2 Audit trails can be used to enhance data security on a network.

(a) Identify **four** activities recorded by a typical audit trail.

1. _____

2. _____

3. _____

4. _____ [4]

(b) Describe a backup and recovery strategy suitable for a batch processing application.

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_____ [6]

(c) Explain why an organisation might need a disaster recovery plan.

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_____ [4]

3 An information system can be developed using prototyping.

(a) Describe how the system could be developed using prototyping.

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_____ [6]

The system could also be developed using the waterfall model.

(b) Describe **three** methods of fact finding used in the analysis stage.

1. _____

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2. _____

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3. _____

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_____ [6]

End users are involved during the analysis stage.

(c) Describe how end users are involved during other stages of the waterfall model.

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4 (a) A business in the USA employs workers in India to operate an on-line help desk.

(i) Describe **two** benefits to the company of this use of ICT.

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2. _____

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_____ [4]

(ii) Some of the help desk operators work from home.

Describe **two** benefits to employees of using ICT to work from home.

1. _____

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2. _____

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_____ [4]

(b) The manufacturing sector makes extensive use of CAD and CAM.

Describe the main features of each of the following.

CAD _____

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CAM _____

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_____ [8]

5 **(a)** Describe **three** health issues which can arise from working with ICT and explain how each can be minimised.

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2. _____

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3. _____

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(b) Describe **three** issues which should be covered in an **Acceptable Use Policy** for employees using ICT.

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2. _____

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3. _____

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   _____ [9]

6 A company has a chain of bookshops throughout the country.

The company has recently started to sell books on its web site.

(a) Describe **two** benefits to the company of using the Internet to sell books.

1. _____

_____

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2. _____

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_____ [4]

(b) Describe **two** reasons why a customer might still prefer to buy a book from a bookshop.

1. _____

_____

_____

2. _____

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_____ [4]

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(c) The company uses a database to store data about orders.

- Customers can make multiple orders
- Each order can refer to a number of books
- A book has only one publisher

Draw an entity relationship (ER) diagram for this system which does not contain a many to many relationship.

[9]

7 (a) Discuss the factors which influence human interaction with computer systems.

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(b) The following issues should be considered when implementing a database

- Data consistency
- User access to data
- Data security

Write an evaluation report addressing these issues with respect to

- A centralised database
- A distributed database

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_____ [10]

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