ADVANCED GCE

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

Networking Solutions

G055

Wednesday 26 January 2011
Afternoon

Duration: 1 hour 30 minutes

Candidate forename		Candidate surname	

Centre number						Candidate number					

INSTRUCTIONS TO CANDIDATES

* The insert will be found in the centre of this document.
* Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
* Use black ink. Pencil may be used for graphs and diagrams only.
* Read each question carefully. Make sure you know what you have to do before starting your answer.
* Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
* Answer **all** the questions.
* Attach your pre-prepared materials for tasks 1–3.
* Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

* The number of marks is given in brackets **[ ]** at the end of each question or part question.
* The total number of marks for this paper is **100**.
* No marks will be given for using brand names of software packages or hardware.
* The quality of your written communication will be assessed through Q4(b) and Q11.
* This document consists of **12** pages. Any blank pages are indicated.

For Examiner's Use		Max
Task 2		21
Task 3		9
1		12
2		2
3		6
4		13
5		4
6		7
7		6
8		2
9		3
10		4
11		11
Total		100

OCR is an exempt Charity

Turn over

Section A

These questions refer to the Recycled Garden Company Ltd (RGC) case study.

1 (a) Explain **two** methods that RGC could use to share information across the network.

Method 1 ....

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Method 2 ....

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.... **[6]**

(b) Identify **two** resources, other than information, that can be shared more easily at RGC when they have a network and describe how each would be used.

Resource 1 ....

Description ....

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Resource 2 ....

Description ....

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.... **[6]**

2   Describe **one** benefit for the sales staff at RGC of having access to eCommerce.

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     .... **[2]**

3   Explain **one** advantage and **one** disadvantage to RGC of using a star network topology.

     Advantage ....

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     Disadvantage ....

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     .... **[6]**

Turn over

4 RGC could choose to implement an intranet and an extranet.

(a) Explain the terms 'intranet' and 'extranet'.

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.... **[4]**

(b) Discuss the implications of RGC using an intranet **and** an extranet.

The quality of written communication will be assessed through your answer to this question.

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.... **[9]**

5 The RGC network has a company-wide internet connection.

Describe **two** functions of a proxy server in this network.

Function 1 ....

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Function 2 ....

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.... **[4]**

Turn over

6 The main server on the RGC network will be a file server.

(a) Describe **two** functions of the file server on the RGC network.

Function 1 ....

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Function 2 ....

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.... **[4]**

(b) Identify three benefits of using this server to manage network security.

Benefit 1 ....

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Benefit 2 ....

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Benefit 3 ....

.... **[3]**

7 RGC will need some protocol software to enable the computers on their network to communicate effectively with each other.

(a) (i) Identify a suitable protocol for the RGC network.

.... **[1]**

(ii) Explain what this protocol does.

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.... **[3]**

(iii) Describe why this protocol is suitable for the RGC network.

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.... **[2]**

Turn over

Section B

These questions DO NOT relate to the case study.

8   Describe **one** way that a communications log can be used to help maintain a network.

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   .... **[2]**

9   When a connection is set up between a network and the internet it is common practice to document all the settings.

   Explain the reasons for documenting all the settings.

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   .... **[3]**

10 Back strain is often associated with poor workstation design.

   Explain how a workstation can be designed to reduce this risk.

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   .... **[4]**

11   Evaluate the methods that an organisation can use to maintain security on a network that is connected to the internet.

The quality of written communication will be assessed through your answer to this question.

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.... **[11]**

END OF QUESTION PAPER

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