OCR
Oxford Cambridge and RSA

Friday 16 June 2017 – Morning

A2 GCE

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

G054/01   Software development
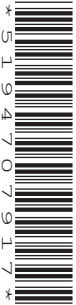
Candidates answer on the Question Paper.	**Duration:** 1 hour 30 minutes
OCR supplied materials:	
• Instructions for Candidates G054/01/IC (inserted)	
Other materials required:	
• Candidate's pre-prepared materials	

Candidate forename		Candidate surname	

Centre number					Candidate number				

INSTRUCTIONS TO CANDIDATES

- The Insert will be found inside this document.
- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- 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).
- Attach your pre-prepared materials for tasks 1–4.
- 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 Q5 and Q11.
- This document consists of **12** pages. Any blank pages are indicated.

For Examiner's Use		Max
Task 2		15
Task 3		10
Task 4		5
1		4
2		7
3		7
4		4
5		12
6		7
7		9
8		4
9		4
10		4
11		8
Total		100

OCR is an exempt Charity

Turn over

2

Answer **all** questions.

SECTION A

This section relates to the case study on The Wendy House Place.

1   The owner of The Wendy House Place has defined the purposes of the proposed system. One of these relates to reports.

Describe **two** other purposes of the new system.

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[4]

2   During the feasibility study, functional and non-functional requirements will be defined.

   (a) Describe the defined **functional** requirements that relate to suppliers.

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.... **[4]**

(b) Describe the **non-functional** requirement which relates to the proposed stock system.

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.... **[3]**

3 Process constraints should be considered during the development of the feasibility study.

(a) Describe the defined **time** process constraint.

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.... **[3]**

(b) Time, hardware and budget are three process constraints.

(i) Identify **one** other process constraint that has been defined by The Wendy House Place.

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.... **[1]**

(ii) Describe how this process constraint has been defined by The Wendy House Place.

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.... **[3]**

4

4   The current system at The Wendy House Place has a number of problems. One of these problems
     is having a direct impact on their customers.

     Explain the problem that impacts the customers of The Wendy House Place.

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     .... **[4]**

5   During the feasibility study different types of investigation methods can be used.

Evaluate, using examples from The Wendy House Place, how document analysis and inspection can be used as investigation methods.

Marks will be awarded for the quality of written communication in your answer.

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.... **[12]**

6   The owner of The Wendy House Place is concerned about the security of the data and information held on the current system.

(a)   Explain how using the automatic features of security software could increase the security of the data and information held on the new system.

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.... **[4]**

(b)   Identify and describe **one** physical security method which could be implemented at The Wendy House Place.

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7

7 Following the implementation of the new system at The Wendy House Place, the workshop staff will be trained using the on-the-job training method.

(a) Describe the on-the-job training method.

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.... **[2]**

(b) Describe **one** advantage and **one** disadvantage to The Wendy House Place of using this training method.

Advantage ....

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.... **[2]**

Disadvantage ....

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.... **[2]**

(c) Identify and describe **one** other training method which could be used at The Wendy House Place.

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.... **[3]**

8

SECTION B

You do not need the case study or your notes to answer these questions.

8 An entity relationship diagram (ERD) is one technique that can be used during the investigation stage of the systems life cycle.

(a) A many to many (M:M) relationship can be shown on an ERD.

Explain what is meant by a M:M relationship.

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.... **[2]**

(b) Describe how a M:M relationship can be resolved.

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.... **[2]**

9 During the feasibility study information will be collected and an output specification will be created.

(a) The **type of data used** is one piece of information that will be collected.

Identify **two** other pieces of information about data that will be collected.

1 ....

2 ....

[2]

(b) Screen report layouts form one component of the output specification.

Identify **two** other components of the output specification.

1 ....

2 ....

[2]

10 Following the development of a new system, it will need to be implemented.

Describe the **phased** implementation method.

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.... **[4]**

Turn over

11 The use of electronic communications and e-commerce is regulated by The Electronic Communications Act.

Discuss the effects of the Electronic Communications Act on businesses.

Marks will be awarded for the quality of written communication in your answer.

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.... **[8]**

END OF QUESTION PAPER

11

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