

ADVANCED GCE G054

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

Unit 15: Software Development

THURSDAY 5 JUNE 2008

Afternoon

Time: 1 hour 30 minutes

Candidates answer on the question paper

Additional materials (enclosed): Instructions for Candidates G054/IC

Additional materials (required):

Candidates pre-prepared materials



Candidate Forename				Candidate Surname				
Centre Number				Candidate Number				

INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer all the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided.
- Attach your pre-prepared material for tasks 1-4.

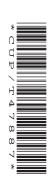
INFORMATION FOR CANDIDATES

- The number of marks for each question 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 awarded for using brand names of software packages or hardware.
- The quality of your written communication will be assessed through Q7.

FOR EXAM	INER'S USE	Max
Task 2		15
Task 3		10
Task 4		5
1		4
2		4
3		4
4		4
5		6
6		4
7		12
8		5
9		4
10		3
11		6
12		8
13		6
TOTAL		100

This document consists of 11 printed pages, 1 blank page and an insert.

SPA (SJF4724) T47887/5 © OCR 2008 [F/102/6821] OCR is an exempt Charity **[Turn over**



2 BLANK PAGE

PLEASE DO NOT WRITE ON THIS PAGE

Section A

This section relates to the case study on Island Fly.

1	One	e of the purposes of the proposed system is to standardise the software used.	
	Des	scribe two other purposes of the proposed system.	
	Pur	pose 1	
	Pur	pose 2	
			[4]
2	The	owner and staff of Island Fly have defined functional and non-functional requirements.	
	(a)	Describe one functional requirement that has been defined by the owner.	
			[2]
	(b)	Describe the defined non-functional requirement that relates to software.	
			[2 ⁻

© OCR 2008 [Turn over

	hardware constrair	nts that have bee	en defined by Islai	nd Fly.	
					['
	problems, caused ent Flyer scheme.	by the current s	ystem at Island Fl	y, that are having	a direct impa
Problem 1					
Problem 2					

E	
	Explain how user names and passwords could be used to achieve this.
•	
•	
•	
•	
ı	ovestigations must be completed during the teasibility stage
	ovestigations must be completed during the feasibility stage. Describe two advantages of using questionnaires as an investigation method in Island Fly.
	Describe two advantages of using questionnaires as an investigation method in Island Fly.
	Describe two advantages of using questionnaires as an investigation method in Island Fly.
	Describe two advantages of using questionnaires as an investigation method in Island Fly.
	Describe two advantages of using questionnaires as an investigation method in Island Fly. Advantage 1
	Describe two advantages of using questionnaires as an investigation method in Island Fly. Advantage 1
	Describe two advantages of using questionnaires as an investigation method in Island Fly. Advantage 1

One of the user requirements is that the proposed system can adapt to any future changes in the operation of Island Fly.

Explain, using examples relating to Island Fly, the different types of maintenance strategies can be used.	that
The quality of your written communication will be assessed through this question.	
	. [12]

7

	ій ехріаіт а	training strat	egy that co	uid be used to	or staff who w	ork in the ha	ngar.
					•••••		
The new s	system at Isl		d be implen		the phased ir		
The new s	system at Isl hy this meth	and Fly coulo	d be implen	nented using		nplementatio	n metho
The new s	system at Isl hy this meth	and Fly coul	d be implen	nented using	the phased ir	nplementatio	n metho
The new s	system at Isl hy this meth	and Fly coul	d be implen	nented using	the phased ir	nplementatio	n metho
The new s	system at Isl hy this meth	and Fly coul	d be implen	nented using	the phased ir	nplementatio	n metho
The new s	system at Isl hy this meth	and Fly coul	d be implen	nented using	the phased ir	nplementatio	n metho

© OCR 2008 [Turn over

10	Information and data about the aeroplanes needs to be stored.
	Identify the most appropriate type of software for storing these records, justifying your choice.
	Software
	Justification
	[3

Section B

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

11 When a system has been developed and tested it needs to be implemented.

Describe	e the following implementation methods:
(i)	direct/big bang

(ii)	pilot

© OCR 2008 [Turn over

12	•	grams and flowcharts can be used during the analysis and design stages of the systems ycle.
	(a)	Explain the function of a L0 dataflow diagram (context diagram).
		[4]
	(b)	Draw and label two components of a systems flowchart.

13	Evaluate the use of rich picture diagrams as a tool in the systems life cycle.
	91



PLEASE DO NOT WRITE ON THIS PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.