

# Mark Scheme (Results) January 2010

GCE

GCE Applied ICT (6953/01)

The Knowledge Worker

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Applied GCE ICT Unit 3 - Mark Scheme - January 2010

Activity	ANSWER	POSS. MARK	MAX
Activity 1	Understanding the problem		
	Any 8 of		
A1	North Cyprus Turtle Watch	1	
A2	Egg protection program	1	
A3	1 of three projects or all projects named (must imply that he is involved in egg protection project)	1	
A4	Sex of turtles depends on average temp of nests/eggs	1	
A5	Depends on high water mark/if sea covers nest more than 1 hour a day	1	
A6	Threshold (line)	1	
A7	Below (threshold) male above female	1	
A8	Turtles build nest as near to water as possible/first available space	1	
A9	Nests can be destroyed if moved	1	
A10	Turtles monogamous/only mates with one partner	1	
A11	Even numbers produce best results	1	
			8
B1	Number of nests to move (accept eggs)	1	
B2	For next 5 years (accept 6)	1	
			2
C1	Even numbers of males and females (need to imply gender)	1	
C2	Increase the number of turtles in the long term	1	
C3	Do not allow the turtles to become extinct	1	
			3
	<b>Total Marks for Activity 1</b>		<b>13</b>

Activity		ANSWER	POSS. MARK	MAX
Activity 2		Sources of Information		
	A1	Information about the number of nests <b>below</b> the threshold against <b>high water mark</b> . (relationship inferred)	1	
	A2	To be used to calculate the numbers of male and female eggs/ that are hatched	1	
	A3, A4	Any two sensible reasons. From: <ul style="list-style-type: none"> <li>• Errors introduced by measurement calculation</li> <li>• Number of eggs in nest.</li> <li>• Size of nests - if larger the distances between nests would be greater /Depth of nest affects area.</li> <li>• Only measured once/may be an anomaly.</li> <li>• Coastal erosion since data collected and used.</li> </ul> Do not accept: unreliable/unknown source	1,1	
				4
	B1	Stated decision - if justified	1	
		<b>Any 3 of</b>		
	B2	Length of <b>survey</b> (2 years measurement for student, 5/6 years for WWF)	1	
	B3	Time of survey (recent and 90's)	1	
	B4	Reputation of WWF	1	
	B5	Primary data - student	1	
	B6	Student measured beach we are concerned with WWF cover wider area.	1	
		<b>Max 3</b>		
		<b>Any 3 of</b>		
	B7	Disease	1	
	B8	Result of turtle farming experiment/captive breeding project	1	
	B9	Global warming	1	
	B10	High growth of predators	1	
	B11	Natural Disaster affecting mating or nesting places	1	
		<b>(max 3)</b>		7

Activity		ANSWER	POSS. MARK	MAX
	C1	To help calculate the number of males and females	1	
	C2	How many nests are below/above it	1	
		Any 2 sensible reasons		
C3,C4		<p>These are examples of the possible reasons for inaccuracies:</p> <ul style="list-style-type: none"> <li>• number of really high tides</li> <li>• changes in tidal patterns / weather fluctuations from year to year/within year</li> <li>• human activity eg breakwater, creation of lagoon (needs sensible example for mark)</li> <li>• global warming</li> <li>• earthquakes /tsunami/natural disasters</li> </ul> <p>no mark awarded for prediction</p>	1,1	
				4
<b>Total Marks for Activity 2</b>				<b>15</b>

Activity	ANSWER		POSS. MARK	MAX
Activity 3	Computer Modelling			
	<b>Import Data</b>			
A1	3 worksheets created		1	
A2,	Import Threshold (13,379 ... 27,533)		1	
A3	Import Back Numbers: Student (209,201 ...137,100) or WWF(211, 206 ... 137,98)		1	
A4	Import Line (17,22 ... 19,24)		1	
A5	All correctly renamed (can be seen in formulae in next two printouts) Import threshold, Import back numbers, Import line		1	
A6	Row & Column headings		1	
				6
	<b>Threshold (Formulae)</b>			
B1	Line data in worksheets correct (or formulae correct)		1	
B2	Threshold data in worksheets correct (or formulae correct)		1	
B3	Line data transferred using formulae		1	
B4	Threshold data transferred using formulae		1	
B5	Correct rows and columns printed with row and column headings (A-E, 2-20)		1	
				5
	<b>Back Numbers (Formulae)</b>			
C1	Data in worksheet correct (or formula correct)		1	
C2	Data Transferred using formulae		1	
C3	Correct rows and columns printed with row and column headings (A-C, 1-4)		1	
				3
	<b>Summary (Formulae)</b>			
D1	Correct formula in cell B5 (=B3+B4) or B5(=SUM(B3:B4))		1	
D2	Formula correctly replicated		1	
D3	When + used then no sum. If sum used , or : delimiter used		1	
D4	If formula used for B6 or - Min		1	
D5	Format condition, option 1, option 2	correct range for Min	1	
D6	Fully correct formula (=if(B4<B3,B3,B4))	similar for Min	1	
D7	Formula replicated correctly (follow through here)		1	
D8	Correct Formula in Cell B8 (=!thresholdC3)		1	
D9	Formula correctly replicated		1	
D10	Correct formula in B12 (=B11*0.1) Accept 10/100 or similar for 10%		1	





Activity		ANSWER	POSS. MARK	MAX
<b>Activity 4</b>		<b>Recommendations</b>		
	A1	Chosen number of nests stated against each of 5 years	1	
	A2	Answer to A1 in table or chart	1	
	A3	Recommendation justified	1	
	A4	Justified by even male/female	1	
	A5	Justified by best turtle number	1	
				5
		<b>Any 4 of</b>		
	B1	Natural Disasters (Earthquake)	1	
	B2	Manmade disasters (Oil Spillage)	1	
	B3	Disease	1	
	B4	Success of farming experiment	1	
	B5	Vandalism / other human activity	1	
	B6	Predators	1	
	B7	Any other relevant factor	1	4
		<b>Graphical Representation of Data</b>		
	C1	Graph fit for purpose	1	
	C2	Graph correctly titled &labelled	1	
				2
		<b>Suitability for Audience(must be at least 12 lines)</b>		
	D1	Spelling & Grammar Correct	1	
	D2	Language suitable for audience	1	
	D3	Professional report layout (Intro, Conc, date, at least 2 other sections, suit font colour & size, suitable use of tools)	1	
				3
		<b>Total Marks for Activity 4</b>		<b>14</b>

Activity		ANSWER	POSS. MARK	MAX
<b>Activity 5</b>		<b>Evaluation</b>		
	A1	Comment on ease of use	<b>1</b>	
	A2	Statement to the effect that it helped you to your solution	<b>1</b>	
	A3	Comment on accuracy of any data	<b>1</b>	
				<b>3</b>
		<b>Max 4 marks (Any combination of)</b>		
	B1	Recommendations for improvement	<b>1</b>	
	B2	Recommendations for improvement with any explanation	<b>2</b>	
	B4	Recommendations for improvement with any explanation with data and source	<b>4</b>	
				<b>4</b>
		<b>Total Marks for Activity 5</b>		<b>7</b>
<b>SWW</b>				
	S1	Authenticating Work (All WP pages have task number, Name, centre number).	<b>1</b>	
	S2	Appropriate Structure (Pages in correct order & Folder assembled correctly)	<b>1</b>	
		<b>Total for SWW</b>		<b>2</b>
		<b>Total for Paper</b>		<b>90</b>

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