Mark Scheme (Results)
Summer 2010

GCE Applied Information and Communication Technology

(6953/01) Unit 3 – 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.

Activity		ANSWER	POSS. MARK	MAX
Activity 1		**Understanding the problem**		
		Any 10 of		
	A1	British Basketball League (BBL) Southern Division basketball	1	
	A2	Different day for each age groups	1	
	A3	Boys and girls on same day	1	
	A4	Collecting players for training session	1	
	A5	15 seats available on each mini-bus (+driver)	1	
	A6	4 mini-buses	1	
	A7	**30** people each session to **transport** /(15 boys & 15 girls)	1	
	A8	Sessions start at 12:30	1	
	A9	Sign-in at 12	1	
	A10	Sessions at Crawley	1	
	A11	Pickups at 14 places /14 teams in league	1	
	A12	Teams can supply any **number** of players	1	
	A13	Mini-bus to wait for 5 minutes	1	
	A14	Two sources of data	1	
				10
		Award marks if somewhere in the decisions it implies more than 1 minibus		
	B1	Which mini-buses make which stops / which clubs they are going to	1	
	B2	Routes taken /order of stops/times of stops	1	
	B3	Start times	1	
		(number of people at each stop is not a decision)		3
		Total Marks for Activity 1		13

Activity 2		Sources of Information			
		A1 –A11 marks relate to the data not the actual journey			
		Any 5 of			
	A1	Different routes chosen (by AA / MM **not** the driver)		1	
	A2	**Long term** road works		1	
	A3	Different assumed speeds/vehicle		1	
	A4	**The employee of Southern Division** might have used different times of day when collecting data (Assumed congestion)		1	
	A5	More up to date maps or information / new roads on route /		1	
	A6	AA /someone may have driven the routes whilst MM will have estimated it from their maps / calculated by some means other driving		1	
	A7	Different user options used / e.g. quickest route /shortest route		1	
	A8	Typo – user data entry error		1	
	A9	Avoid toll roads / via option		1	
	A10	System logic – includes factors like amount of time allowed for traffic lights (needs clear explanation)			
	A11	Any suitable other factor		1	
					5
		Award B1 or B2 if candidates make a choice			
	B1	I will use the AA,	Use both datasets (only if combined in some way)	1	
	B2	and Multimaps,		1	
	B3	and select the longest time,		1	
	B4	to be on the safe side. (award B4 only if B3 awarded)		1	
					4
		Any 6 of			
	C1	Volume of traffic heavy traffic / fewer people of roads		1	
	C2	Road-works / other closures		1	
	C3	Speed		1	
	C4	Accidents		1	
	C5	players turning up late / Bus driver might wait **more than 5 mins**		1	
	C6	Weather		1	
	C7	New roads		1	
	C8	Breakdowns		1	
	C9	Unplanned stops		1	
	C10	Anything sensible		1	
					6
		Total Marks for Activity 2			15

Activity 3		Computer Modelling		
		Import Data		
	A1	Worksheets created	1,1	
	A2	Data Imported correctly AA (67, 115, 130) MM (78,121,135)	1,1	
	A3	Suitable names for worksheet	1,1	
				6
		Timings (Formulae)		
		Print: columns A-D, rows 3-18		
		Formula : B4 =MAX(multi!B2,AA!B2) or similar		
	B1	Correct cell from new AA worksheet	1	
	B2	Correct cell from new Multimaps worksheet	1	
	B3	Biggest value used (If or Max function)	1	
	B4	Replicated correctly (must use at least one datasheet)	1	
				4
		Timetable (Formulae)		
		Printout 1Depart/stop2 in top row (E-F)		
		=IF(C4=A4,D4,D4+5/(24*60)) or similar with different ways of adding 5 minutes (see C5)		
	C1	If Statement used	1	
	C2	Comparison C4 and A4 or reverse	1	
	C3	If same D4 (B4)	1	
	C4	If not same D4 +	1	
	C5	5 minutes value correct eg. time(0,5,0) or "00:05:00" or 5/24*60 or 5/1440	1	
	C6	if correct formula in E4 Sum not used	1	
	C7	Replicated only if correct formula in E4	1	
		printout 2 depart/depart in top row (H+K)		
		H4=IF(F4=C4,G4,G4+5/(60*24))		
		K4=IF(I4=F4,J4,J4+5/(24*60))		
	C8	Column H and K correct	1	
	C9	Column H and K **only** printed on 1 sheet	1	
				9
		Teams (Formula) Print: Columns B-E, rows 2-16		
	D1	Correct formula in cell E3 (=C3+D3) or =SUM(C3,D3) (Accept Sum if : used)	1	
	D2	Formula correctly replicated if working formula	1	
				2
		Printouts		
	E1	All required printouts, no extras or missing sheets	1	
	E2	In right order, no extras or missing sheets	1	
	E3	Column headings on all (must be at least 5 sheets)	1	
	E4	Row headings on all (must be at least 5 sheets)	1	
	E5	Gridlines on all (must be at least 5 sheets)	1	
	E6	Correct header & footer	1	
	E7	Correct rows printed (must be at least 5 sheets)	1	

	E8	Correct columns printed (must be at least 5 sheets including H-K of timetable))		1	
					8
		Total Marks for Activity 3			**29**

Activity 4		**Letters & memos**		
		Memos (screenshots only allowed if only memo can be seen)		
	A1	2 memos produced or 1 with both sets of times	1	
	A2	All minibuses used	1,1	
	A3	No bus leaves before 6	1,1	
	A4	All buses used arrive at or before 12	1,1	
	A5	All arrive between 11.45 and 11.59 if A3 awarded	1,1	
		A2, A3, A4, A5 one for each memo		9

Note: Place student in correct mark band based on content.
QWC adjustment can only reduce mark within band. This must be based on the expectation within the mark band. Marks cannot be added and the adjustment cannot put the mark in a different mark band.

		Letter		
		Indicative Content		

- who is sending letter (2w)
  - BBL
  - Southern Division
- reason for invitation (5r)
  - special coach,
  - why he is good
  - for selection event
  - training session
  - Under 14s
- Information (6i)
  - **Correct Day & Date given**
  - 5 minutes wait
  - Sign in Time
  - Crawley
  - Table info
    - **Times of pickups**
    - **Places of pickups**,
- Letter format
  - acceptance/rejection method
  - salutation (Dear parent / guardian) not names
  - correct close (not yours sincerely MB3)
  - letter date

standard letter produced – not individual

Level	Mark	Descriptor		
0	0	No rewardable material		
Level 1	1-4	May not look like a letter. Some information about the event May not include details of sender and reason for invite Should have the times / places of pickup The candidate uses everyday language and the response lacks clarity and organisation. Spelling, punctuation and the rules of grammar are used with limited accuracy.		
Level 2	5-8	Some content from all sections Basic letter form salutation and close may not be appropriate.		

		The candidate uses some terms and shows some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.		
Level 3	9-12	Most content from each section No redundant information, tabular format used sensibly. Looks like standard letter. Appropriate salutation and close The candidate uses a range of appropriate terms and shows good focus and organisation. Spelling, punctuation and the rules of grammar used with considerable accuracy.		
				12
		Charts (could have one combined pie chart)		
	C1	Percentages shown	1	
	C2	Suitable labels	1	
	C3	Pie charts	1	
	C4	Zeros eliminated	1	
				4
		Total Marks for Activity 4		25

Activity 5		Evaluation		
	A1	Comment on ease of use	1	
	A2	Statement to the effect that it helped you to a solution	1	
				2
		Max 4 marks (Any combination of)		
	B1	Recommendations for improvement System produces individual parent letters	1	
	B2	Recommendations for improvement with any explanation Names and addresses should be stored and a mailmerge used to produce individual letters	2	

		Other possibilities:
		   o Works out route automatically
		   o Put totals on memo
		   o Stop multiple visits to one location		

				4
		Total Marks for Activity 5		6
SWW		At least 3 activities **attempted** for S1 and S2 to be awarded		
	S1	Authenticating Work (All WP pages have activity number, name, candidate number, centre number).	1	
	S2	Appropriate Structure (Pages in correct order & folder assembled correctly)	1	
		Total for SWW		2
		Total for Paper		90