

## **AS GCE ICT Unit G061 Revisions**

### 3.1.1. Data, information, knowledge and processing

Ref	Old	New	Comment
С	<b>Describe</b> different	Compare different	Change of keyword,
	methods used to	methods used to convey	describe to compare.
	convey information	information	
Н	Describe how the	Describe the following	Descriptions can now
	following can affect	and how they can affect	be asked.
	the quality of the	the quality of the	
	information produced	information produced	
I	<b>Describe</b> the	<b>Explain</b> the advantages	Keyword has changed
	advantages and	and disadvantages of	and additional content
	disadvantages of	encoding data <b>, and</b>	– methods of
	encoding data	describe different	encoding.
		methods that can be	
		used to encode data	
J	Describe and give	Describe and give	Methods for check
	examples of the	examples of the following	digit calculations
	following validation	validation methods: range,	added
	methods: range, type,	type, check digit	
	check digit, length,	(modulus 11 and ISBN),	
	lookup,	length, lookup,	
	picture/format and	picture/format and	
	presence, and their	presence, and their	
	purpose,	purpose,	
L	<b>Explain</b> the difference	<b>Describe</b> the difference	Keyword changed
	between back-up and	between back-up and	from Explain to
	archiving of data	archiving of data	Describe

## 3.1.2 Software and hardware components of an information system

Ref	Old	New	Comment
A	Describe the difference between hardware and software, giving examples of each to illustrate the description and explain the lack of standardisation affecting both hardware and software;	Describe the difference between hardware and software and explain the lack of standardisation affecting both hardware and software;	Removed ,giving examples of each to illustrate the description
С	Describe specialist hardware devices for physically disabled users: puff-suck switch, foot mouse, eye typer, Braille printers and keyboards, speakers and microphones;	Describe specialist hardware devices for physically disabled users: puff-suck switch, foot mouse, eye typer, Braille printers and keyboards, speakers and microphones and justify their use for given situations;	Added: and justify their use for given situations;
D	Describe specialist software for physically disabled users: predictive text, sticky keys, zoom, voice recognition;	Describe specialist software for physically disabled users: predictive text, sticky keys, zoom, voice recognition and justify their use for given situations;	Added: and justify their use for given situations;

## 3.1.3 Characteristics of standard applications software and application areas

Ref	Old	New	Comment
A	Identify basic tasks that	Removed and replaced	New bullet
	standard/generic	with:	point A
	applications software can		
	readily be used for: letter	Describe different types	
	writing, memos, reports,	of applications software	
	flyers, brochures, posters,	and justify their use for	
	business cards, graphs,	given tasks.	
	modelling, forecasting, data		
	handling, sorting, searching,		
	mail merging, web page		
	authoring, presentations;		
В	Describe the characteristics of	Describe the	Applications
	the following applications:	characteristics and use	have been
	school administration and	of the following	merged and
	teaching systems, stock control,	systems: <b>personnel</b> ,	new ones
	booking systems, on-line	stock control, invoicing,	added.
	training systems, timetabling	booking, timetabling,	
	and route finding systems,	route finding and	
	customer records systems	training	
	and on-line banking systems;		
С	Describe the purpose and	Describe the purpose	Addition of
	characteristics of wizards,	and characteristics of	sheets as
	<b>styles</b> , templates and macros,	wizards, style <b>sheets</b> ,	opposed to
	describing the advantages and	templates and macros,	styles.
	disadvantages of their use;	describing the	
		advantages and	
		disadvantages of their	
		use;	
Н	Describe how master	Describe how master	Style sheets as
	documents/slides, styles and	documents/slides,	opposed to just
	templates can be used to create	styles, <b>style sheets</b> and	styles added.
	a consistent house style;	templates can be used	
		to create a consistent	
T	Describe how to	house style;	Oldbuller
I	Describe how to	Explain the need for	Old bullet point
	import/export files between	different file types	removed and
	standard/generic	and the advantages	new one put in
	applications with no common	and disadvantages of	its place.
	format;	having different file	
T	Evaloin the needs of different	types.	Domorrod
J	Explain the needs of different		Removed
	users of standard/generic		
	applications software.		

### 3.1.4 Spreadsheet concerns

Ref	Old	New	Comment
В	Explain how variables,	<b>Describe</b> how variables,	Key word
	formulae, rules and	formulae, rules and	changed
	functions are used in	functions are used in	
	modelling software;	modelling software;	

### 3.1.5 Relational database concepts

Ref	Old	New	Comment
В	Identify tables, records,	Identify tables, records,	Explicitly asked
	fields, primary keys and	fields, primary keys and	to interpret
	foreign keys, and <b>define</b>	foreign keys, and interpret	and create
	relationships between	and create entity	ERDs
	entities using an entity	relationship diagram for a	
	relationship diagram for a	given scenario;	
	given scenario;		
G	Describe dynamic and static	Describe dynamic and static	Added
	parameter queries and	parameter queries and	requirement to
	simple and complex queries	simple and complex queries	give examples
	and explain when and how	and explain when and how	of queries.
	they might be used.	they might be used <b>giving</b>	
		examples of use.	

## 3.1.6 Applications software used for presentation and communication of data

Ref	Old	New	Comment
В	Describe how word	Describe how word processing	Added
	processing and desktop	and desktop publishing (DTP)	disadvantages
	publishing (DTP)	software can be used with data	of mail merge
	software can be used	from a spreadsheet or	
	with data from a	database for mail merge, and	
	spreadsheet or database	describe the advantages <b>and</b>	
	for mail merge, and	disadvantages of using this	
	describe the advantages	technique;	
	of using this technique;		
D	<b>Discuss</b> the advantages	<b>Describe</b> the advantages and	Keyword
	and disadvantages of	disadvantages of using clip art	changed.
	using clip art images and	images and collections of	
	collections of thumbnail	thumbnail images;	
	images;		
F	Describe the advantages	Describe the advantages and	Changed and
	and disadvantages of	disadvantages of using graphic	added
	using graphic libraries	libraries and their use in the	applications
	and their use in the	following applications:	that graphic
	following applications:	interior design, landscaping,	libraries can be
	kitchen design,	cartography and network	used for.
	cartography and network	design;	
	design;		
G		Compare image libraries,	This is a new
		clipart libraries and graphic	bullet point
		libraries	

### 3.1.7 The role and impact of ICT

Ref	Old	New	Comment
В	discuss possible future	discuss possible future	Digital piracy
	developments in ICT and	developments in ICT and	added as
	their impact on the	their impact on the	discussion area
	following application areas:	following application areas:	
	transport, medicine, the	transport, medicine, the	
	disabled, education,	disabled, education,	
	entertainment, shopping,	entertainment, <b>digital</b>	
	marketing and	piracy, shopping,	
	communication;	marketing and	
		communication;	
F	Explain why standards		Removed from
	are required and the		updated
	impact of different		specification
	organisations and		
	networks having different		
	standards;		
F		Describe the purpose and	New bullet
		activities of professional	point added
		bodies, eg BCS;	
G		Explain the advantages	New bullet
		and disadvantages of	point added
		belonging to a	
		professional body;	

# **A2 GCE ICT Unit G063 Revisions**

## 3.3.1. The Systems Cycle

Ref	Old	New	Comment
В	Discuss different	Describe the advantages	Keyword changed.
	approaches an analyst	and disadvantages of	
	might use when	different approaches an	
	investigating a	analyst might use when	
	system:	investigating a system:	
	questionnaires,	questionnaires,	
	interviews, meetings,	interviews, meetings,	
	document analysis,	document analysis,	
	observation;	observation;	
G	Describe, interpret	Describe, interpret and	Addition of suitability
	and create critical	create critical path	of use
	path analysis (CPA)	analysis (CPA) and Gantt	
	and Gantt charts <b>as</b>	charts, <b>and for each</b>	
	tools for project	explain its suitability for	
	planning;	use in a given	
		application	
Н	Describe, interpret	Describe, interpret and	Removed state
	and create <b>entity</b>	create data flow diagrams	transition. ERD
	relationship	and flowcharts, and for	moved to AS.
	diagrams, state	each explain its suitability	
	transition diagrams,	for use in a given	
	data flow diagrams	application.	
	and flowcharts, and		
	for each explain its		
	suitability for use in a		
	given application.		

## 3.3.2 Designing computer-based information systems

Ref	Old	New	Comment
Α	<b>Discuss</b> batch, interactive	Compare batch, interactive	Keyword,
	and real-time processing	and real-time processing	discuss
	systems in terms of	systems in terms of	changed to
	processing methods,	processing methods,	compare
	response time and user	response time and user	
	interface requirements;	interface requirements;	
С	<b>Discuss</b> the use of colour,	<b>Explain</b> the use of colour,	Keyword
	layout, quantity of	layout, quantity of	discuss
	information on screen, size of	information on screen, size of	changed to
	font, complexity of language	font, complexity of language	explain
	and type of controls when	and type of controls when	
	designing a human-	designing a human-	
	computer interface	computer interface	
D	Discuss different methods		This has
	of dialogue that allow		been
	interaction between		removed.
	computer and person,		
	person and computer and		
	computer and computer;		
D	<b>Discuss</b> the concept and	<b>Explain</b> the concept and	Old bullet
	implication of good methods	implication of good methods	point E
	of human-device	of human-device	
	communications, particularly	communications, particularly	Keyword
	human-computer interfaces	human-computer interfaces	discuss
	(HCI) using command line	(HCI) using command line	changed to
	interfaces, menus/submenus,	interfaces, menus/submenus,	explain
	graphical user interfaces	graphical user interfaces	
	(GUIs), natural languages	(GUIs), natural languages	
	(including speech input-	(including speech input-	
	output) and forms dialogue;	output) and forms dialogue;	0111 "
G	<b>Discuss</b> the importance of	Explain the importance of	Old bullet
	designing a system model	designing a system model	point H.
	that matches closely the	that matches closely the	77 1
	user's mental model;	user's mental model;	Keyword
			discuss
			changed to
			explain

### 3.3.3 Networks and communications

Ref	Old	New	Comment
В	<b>Discuss</b> the characteristics	<b>Compare</b> the characteristics	Keyword,
ש	and purpose of intranets, the	and purpose of intranets, the	discuss
	internet and extranets;	internet and extranets;	changed to
	internet and extrances,	meer net und extranets,	compare
D	Explain the importance of	Explain the importance of	Addition of
	bandwidth when transmitting	bandwidth when	analyse
	data and how different types	transmitting data and	
	of communication media	<b>analyse</b> how different types	
	(cables, wireless, optical)	of communication media	
	govern the bandwidth	(cables, wireless, optical)	
	available (knowledge of	govern the bandwidth	
	examples of different	available (knowledge of	
	communication media is	examples of different	
	expected);	communication media is	
		expected);	
E	Compare the role of the	Compare the role of the	Added and
	following network	following network	removed
	components: switches, hubs,	components: switches, hubs,	components
	wireless access points,	wireless access points,	and changed
	network interface cards,	network interface cards,	requirement
	wireless network interface	wireless network interface	from
	cards, routers, repeaters,	cards, routers, repeaters,	identify to
	<b>bridges</b> and servers (file,	gateways, firewalls and	justify use
	applications, mail, proxy, print,	servers (file, applications,	
	backup) and <b>identify</b> where	mail, proxy, print, backup)	
	their use would be	and <b>justify</b> where their use	
I	appropriate;	would be appropriate;  Discuss the use and	New bullet
1		implications of social	point
		networking	point
J	Compare different types of	Compare different types of	Old bullet i.
'	broadband connection and	broadband connection and	
	give suitable situations where	analyse suitable situations	Changed
	the use of each would be	where the use of each would	requirement
	appropriate: asymmetric	be appropriate: asymmetric	from give to
	digital subscriber line (ADSL),	digital subscriber line	analyse
	cable, wireless, leased line,	(ADSL), cable, wireless,	
	satellite;	leased line, satellite;	
M		Describe how mobile	New bullet
		technology and networks	point
		can enable communication	
		from anywhere in the	
		world	0111 "
N	Discuss the implications of	Discuss the implications of	Old bullet
	being able to communicate	being able to communicate	point L
	from anywhere in the world	from anywhere in the world	Addition of
	using mobile technology;	using mobile technology and	networks at
		networks	end

# 3.3.4 Applications of ICT

Ref	Old	New	Comment
101	Describe the use of	THE W	Old bullet point
	telecommunication and		A.
	information technology		
	in telephone systems,		Bullet point has
	banking, production		been removed
	control, global		been removed
	positioning systems,		
	navigation and weather		
	forecasting;		
Α	Discuss the use of	Describe the advantages	Old bullet point
11	software-based	and disadvantages of the	B
	training methods;	following software-based	Б
	training methods,	training methods: online	Rewritten to
		tutorials, computer-based	include methods
		training, video	to cover.
		conferencing	to cover.
В	<b>Explain</b> the limitations	<b>Discuss</b> the limitations of	Old bullet point
-	of using ICT in society	using ICT in society today	C.
	today and how advances	and how advances in	G.
	in technology may	technology may overcome	Keyword
	overcome some of those	some of those limitations;	changed.
	limitations;	some of those infiltations,	changea.
D	<b>Explain</b> how databases	Describe how distributed	Old bullet point
	may be stored in more	database <b>systems</b> may be	E.
	than one physical	stored in more than one	L.
	location and how	physical location <b>using the</b>	Key word
	distribution may be	<b>following</b> approaches:	changed and
	carried out using	partitioned between sites	meaning
	<b>different</b> approaches:	(vertical and horizontal),	clarified.
	partitioned between sites	entire databases duplicated	oldi iii odi
	(vertical and horizontal),	at each site, central database	
	entire databases	with remote local indexes;	
	duplicated at each site,	with remote rotal mackets,	
	central database with		
	remote local indexes;		
F	Explain security issues of	Explain security issues of	Old bullet point
	distributed databases:	distributed databases:	G
	interception of data,	interception of data, physical	
	physical access to data,	access to data, consistency	Key word
	consistency and integrity	and integrity of data and	changed.
	of data and <b>describe</b>	analyse methods of	3-3-3
	methods of overcoming	overcoming these issues;	
	these issues;	,	
G	Explain what is meant	Describe the components	Old bullet point
	by an expert system	of an expert system (user	Н
	and describe its	interface, inference engine,	
	components and	knowledge base) and	Sill expert
	applications;	explain the advantages and	systems but
	,	disadvantages for a given	clarified

		1	
		application.	requirements
Н	Describe how the	Describe the features of an	Old bullet point I
	following ICT tools can	effective management	
	be used to assist	information system (MI)	Reworded
	decision making:	and explain the advantages	completed to
	management	and disadvantages of its	clarify.
	information systems	use.	
	(MIS) and expert		
	systems;		
I		Describe how MIS and	New bullet point
		expert systems can be used	– reworded old
		by organisations.	I.
K		Discuss the range of	New bullet point
		services offered by mobile	
		communication services	
		and the impact of these	
		services on individuals and	
		organisations.	
L	Describe the internal	Describe the internal	Old bullet point
	resources of a <b>system</b> :	resources of <b>an</b>	K, clarified to be
	human, technological and	organisation: human,	of an
	accommodation;	technological and	organisation not
		accommodation;	a system
	Explain the importance		Old bullet point
	of ensuring that		L, removed.
	information is		
	exchanged accurately		
	and in a timely manner		
	within an organisation		
	and describe how this		
	is achieved;		
	Describe the		Old bullet point
	characteristics of the		M, moved to AS.
	following systems:		
	personnel, finance and		
	stock control.		

## 3.3.5 Implementing computer-based information systems

Ref	Old	New	Comment
Α	<b>Describe</b> the	Explain the involvement	Key word has changed
	involvement of the	of the client when a	from describe to
	client when a custom-	custom-written computer-	explain
	written computer-	based information system	
	based information	is to be produced, from the	
	system is to be	initial meeting with the	
	produced, from the	client to the installation of	
	initial meeting with	the system;	
	the client to the		
	installation of the		
	system;		

# 3.3.6 Implications of ICT

Ref	Old	New	Comment
В	<b>Describe</b> change	<b>Discuss</b> change	Key word has changed
	management and	management and factors	from describe to
	factors that must be	that must be considered	discuss
	considered (staff	(staff capability, staff	
	capability, staff views, systems, equipment	views, systems, equipment and accommodation)	
	and accommodation)	when managing change;	
	when managing		
	change;		
	Describe the		Old bullet E
	purpose and		
	activities of		Has been moved to AS
	professional bodies,		
	eg BCS;		
	Explain the		Old bullet F
	advantages and		
	disadvantages of		Has been moved to AS
	belonging to a		
	professional body;		