

GCSE

Edexcel GCSE

Information and
Communication Technology
(1185/3185)

Summer 2006

Mark Scheme

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Summer 2006

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Mark Scheme**

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		Total Marks For Section A		20
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Mark Scheme - Summer 2006 1185-2F / 3185-2F
Section B

QUESTION		ANSWER		POSS. MARK	MAX	
1	a					
	i	5		1		
	ii	6		1		
					2	
	b					
	i	PUPIL-ID		1		
	ii	Key field / primary key		1		
					2	
	c		Data Type	Length		
		Surname	Text String Alphanumeric		1	
	PUPIL-ID	Alphanumeric Text String		1		
	Tutor Group	Numeric Decimal	4	1,1		
	Date of Birth	Date Date / time	8	1,1		
					6	
d	Easy to:			1		
	Sort			1		
	Search / query / filter			1		
	Amend / edit / update			1		
	Insert			1		
	Delete				2	
	Validate					
	Export					
				Total	12	
2	a					
	i	SHI32		1		
	ii	B4		1		
	iii	=D4-E4		1		
	iv	=C3*E3		1		
		=sum(C3*E3)		1	4	

**Mark Scheme - Summer 2006 1185-2F / 3185-2F
Section B**

QUESTION	ANSWER	POSS. MARK	MAX
b			
	Highlight cells	1	
	Correct cells identified - A1:A5 and F1:F5 / B1:B5 and F1:F5	1	
	Inser Graph / Select Graph Icon / menu / wizard	1	
	Select bar chart	1	
	Enter / edit title	1	
	Enter / edit axis labels / other details	1	
	Any other sensible editing	1	
			6
	Quality of Written Communication		3
		Total	13

Mark Scheme - Summer 2006 1185-2F / 3185-2F
Section B

QUESTION		ANSWER	POSS. MARK	MAX	
3	a				
	i	Monitor / screen / VDU	1		
		Keyboard / mouse	1		
				2	
	ii	Back / posture problems	1		
		Adjustable chairs	1		
		Height of tables	1		
		Footrests	1		
		Tilting screens	1		
		Swivelling screens	1		
		Ergonomic furniture	1		
		Eye Strain / headache	1		
		Anti-glare screens	1		
		Frequent breaks	1		
		Suitable Lighting	1		
		Avoid sunlight reflecting on screen/ blinds at windows	1		
		Swivelling screens	1		
		Focus on distant objects	1		
		Allow other sensible health issues e.g. epilepsy			4
	b	Change regularly	1		
		Keep it secret	1		
		Mix letters & numbers	1		
		Mix up and lower case	1		
		Don't choose anything obvious	1		
		Don't write down	1		
		Minimum 6 characters	1		
		Don't let people see you entering it	1		
		Make it something you will remember	1		
				4	
			Total	10	

Mark Scheme - Summer 2006 1185-2F / 3185-2F
Section B

QUESTION		ANSWER	POSS. MARK	MAX
4	a			
	i	Desk top publisher / word processor Must be generic name not brand name	1	
	ii	Colour printer / Laser printer / printer	1	2
	b			
		How it can be used	Expansion	
		To set up layout	Same from term to term / consistency	1,1
			Gives school / magazine 'image'	1,1
		For the following marks must have how it will help to get expansion mark		
		How it will help	Expansion	
		Won't need to enter fixed data	Saves time	1,1
			Accurate	1,1
			All will be included	1,1
		Easy to use	Helps newcomers to achieve good results	1,1
		Reusable		1
				6
			Total	8
		Total Marks For Section B		43

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
1	a			
	i	Printer	1	1
	ii	Keyboard	1	1
	iii	Program	1	
	iv	Floppy disk Drive	1	
		Hard disk/drive	1	
		USB PEN	1	
		CDR	1	
		DAT DRIVE	1	
		ZIP DRIVE	1	
				1
	b			
	i	Not permanent / temporary	1	
		Lost when the computer is switched off / volatile	1	
		Stores program / data being worked on	1	
		Can write to and read from	1	
				2
	ii	Read Only Memory	1	1
	iii	Permanent	1	
	Remains when computer is switched off	1		
			1	
c	Simple to use / Don't need any training	1		
	Quicker to enter data	1		
	More accurate data entry	1		
	Price displayed automatically	1		
	Only limited number of choices	1		
			3	
		Total	11	

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
2				
	a			
		Customer ID	1	
		Postcode	1	
		Email address	1	
		Phone no	1	
		Mobile no	1	
		Job details	1	
		Job date	1	
		Job cost	1	
		Paid?	1	
		Title	1	
				4
	b			
		Passwords (once only)	1	
		Store backups in safe place / away from computer	1	
		Firewalls	1	
		Make files read only / write protect	1	
		PC / keyboard locked - through screensaver	1	
		Uninterrupted power supply (UPS)	1	
		Encryption	1	
		One physical method only		2
		Not just backup		
	c			
		Data being passed to the wrong people	1	
		Data being used for unlawful purposes	1	
		Identity theft	1	
		Junk mail	1	
		(nothing to do with credit cards / payment on line)		
				3

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
	d	Must register with DP registrar	1	
		Process data fairly and lawfully	1	
		Collect data fairly and lawfully	1	
		Data must be relevant for the purpose and not excessive	1	
		Data must be accurate / errors must be corrected	1	
		Data must be kept up to date	1	
		Data must be kept only as long as necessary	1	
		Data must be kept secure	1	
		Cannot be sent outside of the European union	1	
		Data must be shown to subjects on request	1	
		Must specify the purpose for holding the data	1	3
		Not Data may be passed to others	Total	12

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION	ANSWER	POSS. MARK	MAX
3			
	a Internet service provider / ISP	1	
	Modem / Broadband	1	
	Browser	1	
			2
	b Wider customer base	1	
	On-line shopping would reduce staff costs	1	
	Customers enter details - staff don't have to retype - less likelihood of error	1,1	
	Cheaper than renting shops / offices	1	
	Can take orders 24 hours a day	1	
			3
	c Need a credit/debit card to make an order	1	
	Card details could be intercepted	1	
	Could be buying from a bogus web site	1	
	May have to pay delivery charge	1	
	Easy to order more than 1	1	
			3
	d E-mail enquires direct so no need to use the phone, could be cheaper	1,1	
	Can browse 24 hours a day	1	
	No need to leave the house	1	
	Can view goods without visiting shops	1	
	Can compare goods / prices of a variety of firms	1	
	Can research what company has to offer	1	
	Discount for ordering on line	1	
	Links from other sites	1	
	Not Order on line (Is in question)		
			3
	Quality of Written Communication		3

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
	e	Hot spots	1	
		Search button / facility	1	
		Back / forward buttons	1	
		Home button	1	
		Link buttons	1	
		Hyperlinks	1	
		Site map	1	
		Menu	1	
				3
			Total	17

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX	
4	a	Local Area Network	1	1	
		LAN	1		
	b	Can easily install / update software	1	3	
		Can share peripherals / printers / scanners	1		
		Can communicate	1		
		Share data	1		
		Can access data anywhere on network	1		
		Easier to backup data	1		
	c	BUS	1	4	
		STAR /BUS	1		
		STAR	1		
		BUS	1		
	d	No need for network manager	1	3	
		Fewer security issues	1		
		No impact of server failure			
		Less risk of attack from viruses	1		
		Lower costs			1
			No need to pay for server		1
			No cable costs		1
No need for network card			1		
Easy to set up	1				
		Total	11		
5	a	i	Word Processing	1	1
		Database	1		
		Spreadsheet	1		
		Drawing / graphics package	1		
		Desk top publishing	1		
		Any sensible generic name not trade name			
	ii	Operating system			
		1			

Mark Scheme - Summer 2006 1185-2F ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
	b			1
	i	Justification	1	
		Centre headings	1	
		Bold	1	
		Italic	1	
		Underline	1	
		Font colour	1	
				3
	ii	Grammar checker	1	
				1
	iii	They come in different languages	1	
		They only recognise miss-spelt words not their context / homophones	1	
		Cannot check spellings in word art	1	
		Cannot check facts like today's date	1	
		Does not recognise when numbers are inserted into words	1	
		Dictionary may be limited	1	
		Only uses one language at a time	1	
		May be set up as American	1	
		Using auto correct can create errors	1	
		Can't pick up errors in names	1	
				4
	c			
	i	Computer Aided Design / Computer Aided Drafting	1	
				1
	ii	Car manufacturing / designing	1	
		Other manufacturing	1	
		Building / construction	1	
		Choreography	1	
		Any designing	1	
				1
			Total	12
		Total Marks For Section C		63
		TOTAL MARKS FOR PAPER		126

**Section A - Multi Choice
Mark Scheme**

- 1 D
- 2 B
- 3 C
- 4 D
- 5 A
- 6 D
- 7 A
- 8 D
- 9 C
- 10 A
- 11 C
- 12 A
- 13 C
- 14 B
- 15 C
- 16 B
- 17 A
- 18 B
- 19 C
- 20 C

		Total Marks For Section A		20
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Mark Scheme - Summer 2006 1185-2H / 3185-2H
Section B

QUESTION	ANSWER	POSS. MARK	MAX
1			
a	Highlight cells	1	
	Correct cells identified - A1:A5 and F1:F5 or B1:B5 and F1:F5	1	
	Insert Graph / Select Graph Icon / menu / wizard	1	
	Select bar chart	1	
	Add / edit title	1	
	Add / edit axis / other details	1	
	Any other sensible editing	1	
			6
b	Typical data, values from 1 - 149	1,1	
	Extreme data, 0 / 150	1,1	
	Invalid data, values > 150	1,1	
	Invalid data, text	1,1	
			6
		Total	12
2			
	Back / posture problems	1	
	Adjustable chairs	1	
	Height of tables	1	
	Footrests	1	
	Tilting screens	1	
	Swivelling screens	1	
	Ergonomic furniture	1	
	Eye Strain /Headaches	1	
	Anti-glare screens	1	
	Frequent breaks	1	
	Suitable Lighting	1	
	Avoid sunlight reflecting on screen/ blinds at windows	1	
	Swivelling screens	1	
	Focus on distant objects	1	
	Allow other sensible health issues e.g. epilepsy		
			4
		Total	4

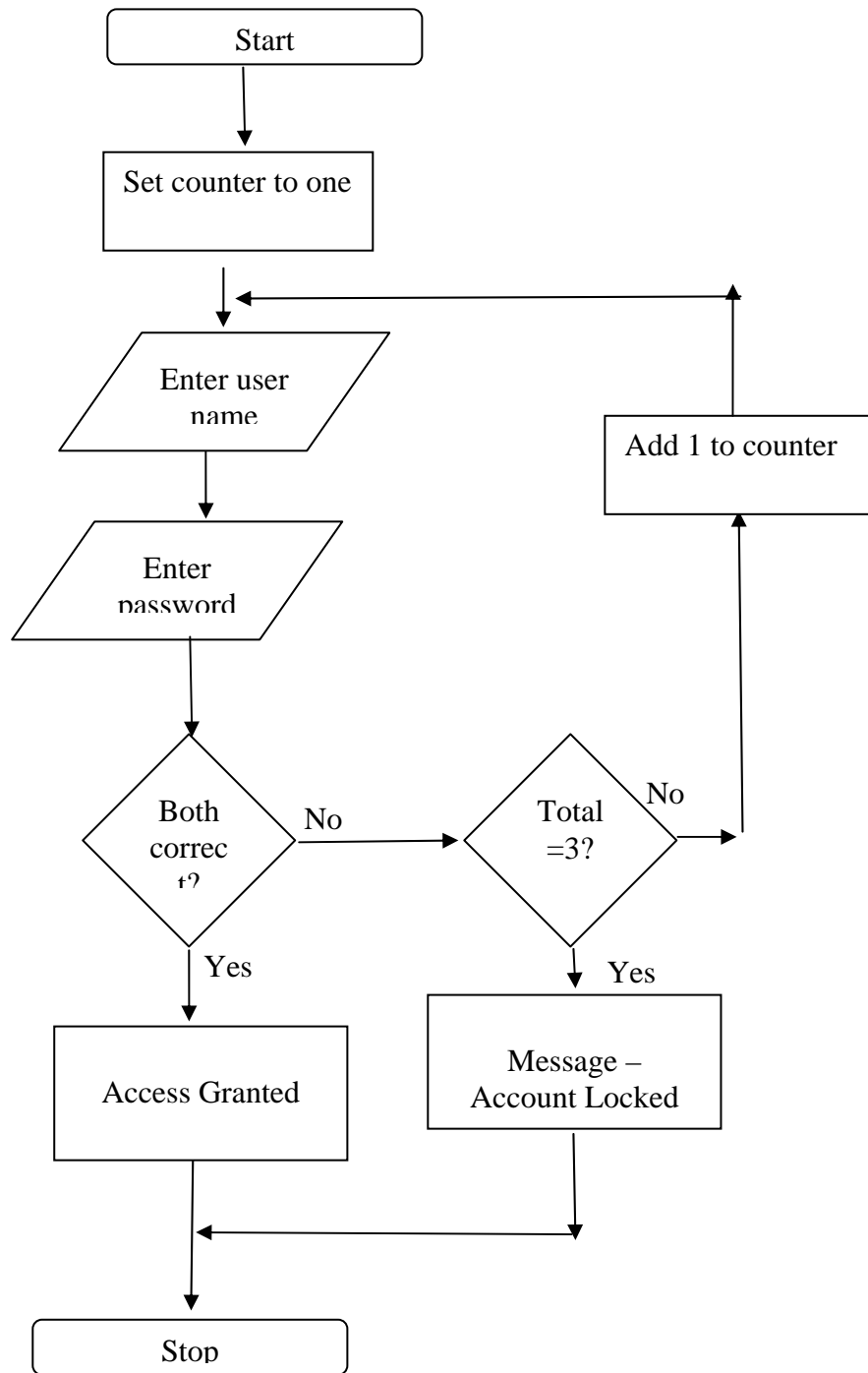
Mark Scheme - Summer 2006 1185-2H / 3185-2H
Section B

QUESTION	ANSWER	POSS. MARK	MAX
3			
	a		
	Can only be 2 values /alternatives	1	
	Yes / No	1	
	True / False	1	
	M / F	1	
			2
	Don't allow answers implying short versions of male & female		
	b		
	i		
	JSCO / 02JSCO/ Jaspreet's ID / Jaspreet's PUPIL-ID	1	
	JCOU / 02JCOU	1	
			2
	ii		
	Verification	1	
	Proof reading	1	
	Check by other person	1	
	Double Entry	1	
	Validation with appropriate reasoning linked to initial and surname	2,0	
			2
	c		
	Gender equals F	1	
	And (implied e.g. whose)	1	
	Tutor group includes 9 / tutor group = 9*** / PUPIL_ID = 03****	1	
	Allow logically correct answers		
			3
		Total	9

Mark Scheme - Summer 2006 1185-2H / 3185-2H
Section B

QUESTION	ANSWER	POSS. MARK	MAX
4			
	How it can be used	Expansion	
	To set up layout	Same from term to term / consistency	1,1
		Gives school / magazine 'image'	1,1
	For the following marks must have how it will help to get expansion mark		
	How it will help	Expansion	
	Won't need to enter fixed data	Saves time	1,1
		Accurate	1,1
		All will be included	1,1
	Easy to use	Helps newcomers to achieve good results	1,1
	Reusable		1
			6
	Quality of Written Communication		3
		Total	9
5	a	Ignore shapes	
		Logically correct, but no counter, including lines and arrows	1
		Logically correct, with counter, including lines and arrows	2
		Logically correct, with counter, excluding arrows	1
		Error message appropriately included	1
			3
	b	Hackers	1
		Passwords (once only)	1
		Firewall	1
		Encryption	1
		Adware / spyware	1
		Viruses	1
		Use anti virus software	1
		Don't open unknown e-mails	1
		Keep virus checker up to date	1
		Access rights	1
			6
		Total	9
		Total Marks For Section B	
			42

Flow Chart for question 5 a



Mark Scheme - Summer 2006 1185-2H ONLY
Section C

QUESTION	ANSWER	POSS. MARK	MAX
1			
	a		
	Set pattern of letters, numbers, spaces	1	
	Data entry restricted	1	
	Prevents data entry errors	1	
	Example for post code	1	
			3
	b		
	i		
	Passwords (once only)	1	
	Store backups away from computer / in safe	1	
	Firewalls	1	
	Make files read only / write protect	1	
	PC / keyboard locked through screensaver	1	
	Uninterrupted power supply (UPS)	1	
	One physical method only	1	
	Encryption	1	
	NOT just backup		
			3
	ii		
	Data being passed to the wrong people	1	
	Data being used for unlawful purposes	1	
	Identity theft	1	
	Junk mail	1	
	(Nothing to do with credit cards / payments on line)	1	
			2
	iii		
	Must register with DP registrar	1	
	Collected data fairly and lawfully	1	
	Process data fairly and lawfully	1	
	Data must be relevant for the purpose and not excessive	1	
	Data must be accurate / errors must be corrected	1	
	Data must be kept up to date	1	
	Data must be kept only as long as necessary	1	
	Data must be kept secure / confidential	1	
	Cannot be sent outside of the European union	1	
	Data must be shown to subjects on request	1	
	Must specify the purpose for holding the data	1	
			3
	Not Data may be passed to others		

Mark Scheme - Summer 2006 1185-2H ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
	c			
	i	IF(D8>=1000,D8*0.1,0) / other totally correct answer	3	
		IF	1	
		D8>=1000 / D8>999.99 with correct outcomes	1	
		D8*0.10 / clearly identifies need for calculating 10%	1	
				3
		Correct conditions expressed in different ways to be credited.		
	ii	=D11*17.5%	1	
		=D11*0.175	1	
		=D11/100*17.5	1	
				1
	d			
	i	Record	1	
		Set of keystrokes /actions	1	
		To carry out a task	1	
				2
	ii	Combination of keys	1	
		Button / Icon on tool bar	1	
		Set macro to run to respond to an event	1	
		Select macro from tools menu & select run	1	
				2
	e	Look up table / lookup / vlookup / hlookup	1	1
			Total	20

Mark Scheme - Summer 2006 1185-2H ONLY
Section C

QUESTION	ANSWER	POSS. MARK	MAX
2			
	a		
	Search Engine	1	
	Type in Chirpy Toys / company name	1	
	Select UK sites	1	
	Choose from list	1	
	Top on list most likely	1	
	Click on link	1	
			3
	b		
	Wider customer base	1	
	On-line shopping would reduce staff costs	1	
	Customers enter data directly staff don't have to retype in, less likelihood of error	1,1	
	Cheaper than renting shops / offices	1	
	Can take orders 24 hours a day	1	
			3
	c		
	E-mail enquiries direct so no need to use phone, could be cheaper	1,1	
	Can browse 24 hours a day	1	
	No need to leave the house	1	
	Can view goods without visiting shops	1	
	Can research what company offers	1	
	Can compare goods / prices of a variety of firms	1	
	Discount for ordering online	1	
	Links from other websites	1	
	Not order online - is in question		
			3
	d		
	Need a credit/debit card to make an order	1	
	Card details could be intercepted	1	
	Could be buying from a bogus web site	1	
	May have to pay a delivery charge	1	
	Easy to order more than once	1	
			3
		Total	12

Mark Scheme - Summer 2006 1185-2H ONLY
Section C

QUESTION	ANSWER		POSS. MARK	MAX
3				
	a			
	i	Not permanent / temporary	1	
		Lost when the computer is switched off / volatile	1	
		Stores program / data being worked on	1	
		Can read from and write to	1	
				2
	ii	Permanent	1	
		Remains when computer is switched off	1	1
	b			
	i	ALU		
		Is where the data is processed	1	
		Arithmetic part does the calculation	1	
		Logic part makes the decisions / comparisons	1	
		Data is manipulated and acted upon	1	
				3
	ii	IAS		
		Current / active data	1	
		(Current / active) programs	1	
		Makes the access time to data much shorter	1	
				3
	iii	Control Unit		
		Makes the system work	1	
		Controls the hardware	1	
		Monitors the hardware	1	
		Controls the input and output of data	1	
		Controls the flow of data through the CPU	1	
		Decodes the instructions	1	
		Sends signals to rest of system	1	
				3
			Total	12

Mark Scheme - Summer 2006 1185-2H ONLY
Section C

QUESTION		ANSWER	POSS. MARK	MAX
4				
	a			
		No need for network manager	1	
		Fewer security issues	1	
		No impact of file server failure	1	
		Less risk of attack from viruses	1	
		Lower costs		
		No need to pay for server	1	
		No cable costs	1	
		No need for network card	1	
		Easy to set up	1	
				3
		Quality of Written Communication		3
	b			
		Can easily install / update software	1	
		Can share peripherals / printers / scanners	1	
		Can communicate	1	
		Share data	1	
		Can access data anywhere on network	1	
		Easier to backup data	1	
				3

**Mark Scheme - Summer 2006 1185-2H ONLY
Section C**

QUESTION		ANSWER	POSS. MARK	MAX
4	c	Network interface card	1	
		Circuit board	1	
		In each PC	1	
		Links PC to network	1	
		Server	1	
		Central data storage area	1	
		Stores data files and programs	1	
		Files downloaded to PC	1	
		Files uploaded to Server	1	
		Print Server	1	
		Receives instruction from work stations	1	
		Controls queues	1	
		Network operating System	1	
		Logs PCs being used	1	
		Logs users	1	
		Organises hardware & software	1	
		Security	1	
		Work stations / terminals	1	
		Linked by cables	1	
		Star / bus / line topologies	1	
		Fibre Optic Cables	1	
		Expensive	1	
		Extremely fast	1	
		Pulses of light	1	
		Unshielded Twisted Pair	1	
		Similar to telephone cables	1	
Cheap	1			
High transmission rate	1			
Coaxial cable	1			
Same as TV cable	1			
Slow	1			
Wireless access point	1			
Hub / switch / router	1			
				10
			Total	16
		Total marks For Section C		63
		TOTAL MARK FOR PAPER		126

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