



SEPTEMBER TRIAL EXAMINATION

GRADE 12

**COMPUTER APPLICATIONS TECHNOLOGY P2
SEPTEMBER 2013
MEMORANDUM**

MARKS: 150

This memorandum consists of 12 pages

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

1. Revisit questions and memorandum frequently during the first half hour of marking. Where there is an internal moderator available, let him/her moderate the first few scripts marked to clarify interpretation of the answers.
2. It is advisable to read the question frequently (and re-read) together with the candidate's response to check if they correlate. Do not get misled by candidates' statements/answers.
3. Be careful not to focus on keywords or general statements, but rather read the entire answer. If in doubt, read the entire answer and then the question and memorandum. Ask yourself if the response could 'fit' into the memorandum to allocate the correct marks to the candidate, for example memo states 'cheap' and learner responds 'less expensive'.
4. Beware of overlapping answers to a specific question. In general, one mark is awarded per fact.
5. Additions to the memo must be made to the memorandum and the scripts already marked must be re-marked for that specific question(s).

SECTION A

QUESTION 1 MATCHING ITEMS			
1.1	D	✓	(1)
1.2	H	✓	(1)
1.3	L	✓	(1)
1.4	A	✓	(1)
1.5	O	✓	(1)
1.6	E	✓	(1)
1.7	N/F	✓	(1)
1.8	J	✓	(1)
1.9	G	✓	(1)
1.10	B	✓	(1)

QUESTION 2 MULTIPLE-CHOICE QUESTIONS			
2.1	B	✓	(1)
2.2	B	✓	(1)
2.3	B	✓	(1)
2.4	A	✓	(1)
2.5	C	✓	(1)
2.6	A	✓	(1)
2.7	C	✓	(1)
2.8	D	✓	(1)
2.9	B	✓	(1)
2.10	C	✓	(1)

TOTAL SECTION A: 20

SECTION B
QUESTION 3

3.1.1	Solid State Drive ✓	(1)	
3.1.2	- Faster - no moving parts, - more expensive per Gb ✓✓Any 2 (or other acceptable answer)	(2)	
3.2	Means included✓ or enclosed – comes with the system internal✓ (as to external hardware) (Accept description/elaboration of the above)	(2)	(2)
3.3.1	- Connect to a digital projector/ - Connect to a HDTV - Connect to cell phone's adapter to demonstrate apps ✓✓any 2 (accept any other workable idea)	(2)	
3.3.2	- HDTV - Full HD digital projector - Media player - Blu ray disk players ✓any 1 (accept any other workable idea)	(1)	(3)
3.4			
3.4.1	3072✓(accept 3x1024)	(1)	
3.4.2	- Video/movie files - Audio/music files - Pictures/photos (high resolution) - Multi-media files ✓✓any 2 (accept extensions (e. g. flv, mkv, wmv, avi, mp4, etc.))	(2)	(3)
3.5			
3.5.1	8GB DDR3-1333 RAM (accept RAM)✓	(1)	
3.5.2	Information stored in RAM is lost if the power is removed/(non-permanent) ✓	(1)	(2)
3.6			
3.6.1	- Fingerprint scanner - iris scanner - facial recognition - voice recognition ✓Any 1(accept any other appropriate biometric device)	(1)	
3.6.2	Measuring/identifying✓ physiological characteristics related to the shape of the body✓	(2)	(3)
3.7.1	Spooling✓	(1)	
3.7.2	- Documents are sent to the print queue - Printer prints at its own rate - No waiting before sending the next document ✓any 1	(1)	(2)
3.8			
3.8.1	An Android smartphone	(1)	(2)

	- Android tablet ✓any 1 (accept a particular device name, e.g. HTC One/Galaxy S3/Galaxy Tab, etc.)												
3.8.2	Google Play is a standard software distribution channel for mainstream Android OS devices✓ (accept any reference to a logical connection between Android OS and Google Play)	(1)											
3.9													
3.9.1	A laser printer✓	(1)											
3.9.2	<table border="1"><thead><tr><th>considerations:</th><th>explanations:</th></tr></thead><tbody><tr><td>Energy efficiency</td><td>Power-saving mode; save the environment</td></tr><tr><td>Connectivity options</td><td>WiFi connectivity</td></tr><tr><td>Speed in pages per minute</td><td>reduce waiting period</td></tr><tr><td>Colour options</td><td>Monochrome vs colour.</td></tr></tbody></table> ✓✓ any 2considerations +✓✓2 matching explanations (Accept any other valid considerations or explanations)	considerations:	explanations:	Energy efficiency	Power-saving mode; save the environment	Connectivity options	WiFi connectivity	Speed in pages per minute	reduce waiting period	Colour options	Monochrome vs colour.	(4)	(5)
considerations:	explanations:												
Energy efficiency	Power-saving mode; save the environment												
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Speed in pages per minute	reduce waiting period												
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3.10													
3.10.1	- Bluetooth - Via media card reader - Via USB cable - Via apps/software on the cell phone (such as WhatsApp/Twitter/Facebook/MXit, Google Drive/Dropbox /Picasa/etc.) ✓✓any 2	(2)											
3.10.2	<u>Bluetooth:</u> - Enable Bluetooth on laptop and cell phone - Pair the devices - Transmit photos <u>Via card reader:</u> - Take media card from cell phone - Insert into reader in laptop - Copy photos from card <u>Via USB cable:</u> - Connect cell phone via USB cable - Transfer photos from cell as media device or via cell phone software <u>Via software:</u> - Send photos to cloud server via cell phone - Open application on laptop and download ✓✓any 2 ways + ✓✓2 steps	(4)	(6)										
			[31]										

QUESTION 4

4.1			
4.1.1	- Software that controls✓ all the operations that takes place in a computer✓ or - Software that manages✓ the computer hardware✓	(2)	
4.1.2	- Controls memory management - Controls storage - Manages processes, (input/output, booting, basic security, etc.) - Interface between computer and user - Controls hardware and software	✓✓ (Any 2) (2)	
4.1.3	- Software may have more faults than normal proprietary software. - Very little textbooks, manuals or training material available. - No help from developer in the form of a call centre. - Software may not have all the features needed.	✓✓ (Any 2) (2)	(6)
4.2			
4.2.1	When separate application programs✓ are sold as a group, ✓ it is called an office suite	(2)	
4.2.2	Application software✓	(1)	
4.2.3	- From software developer's website - From the supplier - With the original CD/DVD set/packaging - On the license agreement provided	✓ (Any 1) (1)	
4.2.4	- To ensure that the program is loaded only on the number of computers specified on the license - Reduce piracy/certify that program is an original copy/increase security	✓ (Any 1) (1)	(5)
4.3			
4.3.1	A driver is software ✓ that is used to control a specific hardware device. ✓	(2)	
4.3.2	- You simply connect a cable to a USB or Firewire Port; ✓ - the computer then detects that new hardware has been✓ - connected and starts up the software(driver) needed to control it. ✓	(3)	(5)
4.4	- Emptying Recycle Bin - Removing temporary files from Internet - Removing temporary files created by operating system / Windows - Uninstalling components of the operating system not needed - Uninstalling programs you never use	✓✓ (Any 2) (2)	(2)
4.5			
4.5.1	- Better security/'Bugs' will be fixed/Errors are fixed - Modifications to device drivers are made - Access to new expanded functions are given - Allow new functionality to some programs - Solves problems that occurred in the program, etc.	✓✓ (Any 2) (2)	
4.5.2	A Patch is a small update used to correct a specific problem.✓ A service pack is a collection of patches that are combined in one download.✓	(2)	(4)
4.6			(6)

4.6.1	A virus is a program✓that is written to perform unwanted actions on a computer✓	(2)	
4.6.2	Malware✓	(1)	
4.6.3	• Computer/operating system runs slowly • Anti-virus pop-up message appears/report by anti-virus software • An unusual image or message appears/sound or music is heard • Duplicate files and folders appear/unknown program or files suddenly appear/files appear as shortcuts • A program or file is suddenly missing • Memory is used up/available memory is less • The size of files changes • Files become corrupted/do not work properly • System properties change, etc. ✓✓✓(Any 3)	(3)	
			[28]

QUESTION 5

5.1.1	- Sharing of expensive equipment - Sharing of data - Transferring of information and data - Centralisation of data - Increased security and control - Increased communication	✓✓Any 2	(2)	
5.1.2	LAN✓		(1)	(3)
5.2	Advantages: - No messy cables - Mobility within the range Disadvantages: - Less reliable than cabled connection - Increased cost for initial setup	✓Any 1	(2)	(2)
5.3				
5.3.1	- Speed - Download limits (cap) - Mobility - Coverage/Availability	✓✓Any 2 x	(2)	
5.3.2	With broadband - pay for - download of data you (cap/uncapped)✓ with a dial-up - you pay for the time on the Internet. ✓		(2)	
5.3.3	The 512Kbps is the slower upload speed ✓ 4Mbps is the faster download speed. ✓		(2)	(6)
5.4				
5.4.1	VoIP converts voice into data packets and transmits it as data ✓ normal telephone call you pay for the line rental and call cost ✓		(2)	
5.4.2	- You need to have an internet connection - Both users need to use the same software - You need to purchase credits - The call quality may be poor if you have a slow internet connection - You can quickly use up your data cap especially when using video	✓✓Any 2	(2)	
5.4.3	Microphone ✓ Webcam ✓		(2)	
5.4.4	Skype ✓		(1)	
5.4.5	The sharing and storage of resources ✓ offered as services over the Internet. ✓		(2)	
5.4.6	Google Drive,		(1)	(10)

	• Skydrive, • Dropbox	✓Any 1	
5.5			
5.5.1	Identity theft refers to stealing another person or company's identity (personal info)✓in order to commit a crime/fraud ✓	(2)	
5.5.2	Users are lured/redirected to false replica websites ✓ Emails that request you to provide personal information ✓	(2)	
5.5.3	• Use internet security software • Do not disclose personal details • Do not respond to emails from an unknown source	✓✓ Any 2 (2)	(6)
			[27]

QUESTION 6

6.1																			
6.1.1	A worker/user✓ who works from everywhere/does not have to be from one central place✓ Alternatives: a "home-sourced," or "work-at-home" employee/work from home		(2)																
6.1.2	<table><tr><th>Forms of communication</th><th>Improvement</th></tr><tr><td>E-mail</td><td> • Faster than normal/snail mail • More accessible • Popular </td></tr><tr><td>Blogs/wikis/forums/Bulletin boards/forums</td><td> • faster • accessible with Internet connection </td></tr><tr><td>Video conference/VoIP (Skype)</td><td> • Immediate • Simulation of face-to-face • Saves on commuting • Saves on time • Cost-effective </td></tr><tr><td>Fax-to-e-mail</td><td> • No additional hardware to receive faxes • Convenient to receive in mailbox </td></tr><tr><td>Social networking (Facebook/Twitter/LinkedIn, etc.)</td><td> • Instant • Notification when new post is made • Can communicate with clients • Easy advertising • Can form groups • Collaboration </td></tr><tr><td>RSS feeds</td><td> • Push-technology • User receives updates as soon as they appear • Up-to-date </td></tr><tr><td>Instant messaging (IM) Google Plus/Hangouts/ Mixer/ SMS/MMS/ Chat/Internet Relay Chat (IRC)</td><td> • Fast • Cost-effective • Immediate reply </td></tr></table>		Forms of communication	Improvement	E-mail	• Faster than normal/snail mail • More accessible • Popular	Blogs/wikis/forums/Bulletin boards/forums	• faster • accessible with Internet connection	Video conference/VoIP (Skype)	• Immediate • Simulation of face-to-face • Saves on commuting • Saves on time • Cost-effective	Fax-to-e-mail	• No additional hardware to receive faxes • Convenient to receive in mailbox	Social networking (Facebook/Twitter/LinkedIn, etc.)	• Instant • Notification when new post is made • Can communicate with clients • Easy advertising • Can form groups • Collaboration	RSS feeds	• Push-technology • User receives updates as soon as they appear • Up-to-date	Instant messaging (IM) Google Plus/Hangouts/ Mixer/ SMS/MMS/ Chat/Internet Relay Chat (IRC)	• Fast • Cost-effective • Immediate reply	(4)
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	Digital Documents (ePub/etc) Cloud computing (DropBox, Google Drive/Google Docs, etc) - Enhanced collaboration - Access documents anywhere with Internet access - Provision of storage space		
	(Any✓✓ 2 forms with 2✓✓ acceptable matching improvements)		
6.2			
6.2.1	Careers: - Educational blogging - Resource developers for learning and teaching materials - Knowledge workers in field of education - Consultants for upskilling/retooling/professional development - Educational analysts - Instructional design - Computer-based instruction/teaching ✓✓any 2 (accept careers that link education with use of ICTs)	(2)	
6.2.2	- Information/knowledge management skills (organising/sourcing/validating information) - Creating professional layouts (documents/etc.) - Ability to create presentations - Ability to create multi-media educational resources - Ability to enhance teaching (use of data projectors/video-conferencing, etc.) - Ability to enhance communication (e-communication) - Ability to organise resources electronically (file structure) - Information searching skills (Use of Internet) ✓✓any 2	(2)	(4)
6.3			
6.3.1	- password - username - gender - age/birthdate/birthday - nationality - education - interest(s) - self-description prose - picture(s) - friend listings - testimonials - etc. (other acceptable elements)	(2)	(7)

	✓✓any 2		
6.3.2	create a duplicate user's name and profile picture from their existing account✓	(1)	
6.3.3	When using a computer: • Select complex password/PINs (of letters, numbers and symbols). • Install firewall, anti-virus, anti-spyware, and security software. • Don't reply to spam or emails that ask for banking information. • For online transactions, look for https://, a closed lock or an unbroken key icon. • When disposing of hard drives, use overwrite software or destroy the drive ✓✓any 2 (or any other acceptable answer)	(2)	
6.3.4	• Monitoring/spyware/tracking software • Modern surveillance technologies • Checking e-mail/cell phone calls • Social networking sites • GPS technology (on cell phones) ✓✓any 2 (or any other acceptable answer)	(2)	
			[17]

QUESTION 7

7.1			
7.1.1	• Fonts installed not the same • Printer settings are different • Different printer installed/default printer different (printer driver) • Different operating systems on the computers ✓✓any 2 (or any acceptable answer)	(2)	
7.1.2	Save as/Convert to PDF format ✓	(2)	(4)
7.2	• By changing page orientation to portrait • By using columns on the page ✓ (Any one listed or other acceptable solution)	(1)	(1)
7.3	Select cells in the middle row, right click, Merge Cells ✓ <i>(accept merge cells even if selection and row are not mentioned)</i> Borders and Shading✓ Borders Tab✓ (accept Borders) Setting: Grid✓ (accept Grid) Width: 6pt✓ (accept “change width” or any indication of line width being modified) Shading Tab✓ (accept Shading) Patterns: Style✓ (accept Pattern, accept Fill) Apply to: Cell✓ (or any other acceptable answer)	(8)	(8)
7.4.1			
7.4.1.1	Merging of cells✓ Merge and Centre ✓	(2)	
7.4.1.2	Text wrap✓ Use of alt+Enter ✓	(2)	
7.4.2.1	COUNTIF ✓✓	(2)	
7.4.2.2	COUNTA ✓✓	(2)	(8)
7.5			
7.5.1	Accept either Gender/Facebook/ WhatsApp as the field. ✓ Any suitable motivation explaining that the default value is the most often used/likely value for that field. ✓	(2)	
7.5.2	A field that uniquely✓ identifies a record. The CellNo field ✓ (Do not accept Email field as a primary key as some entries are blank.).	(2)	
7.5.3	• To force users to enter data • To enforce the correct number of digits • To enforce the correct format, etc. ✓✓ (Any 2)	(2)	(6)
			[27]
	TOTAL SECTION B:		130
	GRAND TOTAL		150