



SEPTEMBER TRIAL EXAMINATION

GRADE 12

**COMPUTER APPLICATIONS TECHNOLOGY P2
SEPTEMBER 2015
MEMORANDUM**

This exam memorandum consists of 13 pages

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

- Revisit the questions and the memorandum/marking guideline frequently during the marking session.
- It is advisable to read the question frequently (and re-read) together with the candidate's response to check that it correlates, so that you are not misled by the candidate's statements/answers.
- 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 paper and memorandum. Ask yourself or your senior marker if the response could 'fit' into the memorandum before allocating the correct marks to the candidate. For example, the memorandum states 'cheap' and the learner responds with 'less expensive'.
- Beware of overlapping answers to a specific question. In general, one mark is awarded per fact.

SECTION A**QUESTION 1: MATCHING ITEMS**

1.1	R	✓	1
1.2	B	✓	1
1.3	M	✓	1
1.4	O	✓	1
1.5	Q	✓	1
1.6	C	✓	1
1.7	L	✓	1
1.8	J	✓	1
1.9	P	✓	1
1.10	H	✓	1
Total: [10]			

QUESTION 2: MULTIPLE-CHOICE

2.1	B or D	✓	1
2.2	D	✓	1
2.3	B	✓	1
2.4	A	✓	1
2.5	A	✓	1
2.6	B	✓	1
2.7	D	✓	1
2.8	D	✓	1
2.9	B	✓	1
2.10	B	✓	1
Total: [10]			

QUESTION 3: TRUE/FALSE ITEMS

(Note to marker: In QUESTIONS 3.1, 3.3 , 3.4 and 3.5 candidates need to provide both the word 'False' and the correct term, e.g. wiki, in order to obtain the mark.)

3.1	False- Phablet ✓	1
3.2	True ✓	1
3.3	False – Twitter ✓	1
3.4	False – Ctrl V ✓	1
3.5	False – survey ✓-(also accept questionnaire, interview, poll, etc.)	1
		[5]

TOTAL SECTION A: 25

SECTION B**QUESTION 4: SYSTEMS TECHNOLOGIES**

4.1	- Convergence is the merging or "coming together"✓ of different technologies/devices - into a single technology/device✓ Any ONE example such as a smartphone, multifunction printer, etc. ✓ (cellphone can also be accepted)		3
4.2	- Check if there is any dust or lint underneath the mouse - Make sure you are using a non-reflective surface - Check batteries if it is a wireless mouse - Disconnect and reconnect the mouse cable/receiver - Update/reinstall the driver ✓✓ (Any two)		2
4.3	A user or group of users who use a small collection of computing devices in a relatively small area ✓ (Note to marker: Accept any answer that directs to small scale computer usage)		1
4.4	- Disk fragmentation: Parts of files scattered over (non-contiguous areas of) a disk✓. - Defragmentation: Scattered parts of files re-organised into an adjacent/ contiguous area/together ✓		2
4.5.1	A software bug is an error within a program. ✓	1	3
4.5.2	- A Patch is an update to rectify a specific error (bug) in a program✓ - A Service pack is a launch of a series of corrections (patches) and new facilities not part of original program. ✓	2	
4.6	RAM stores data temporarily✓ (if computer is switched off it will lose the data)		1
4.7	- Remote surgery (improvements in medical field) - data/information access using the internet - Distance education - Cellphone banking - Making computer more accessible for disabled users (Note: Or any other valid answer) ✓✓ (Any 2)		2

4.8.1	• It is generally free to use. • It does not need to be installed on the local hard drive, and therefore it saves space. • It is easier to share and collaborate on documents. • You can access your documents in any location where you have Internet access (including on mobile devices). ✓✓ (Any 2)	2	3
4.8.2	• OFFICE 365 or Google Apps or Zoho Docs ✓(Any one)	1	
4.9.	• Wi-Fi • Built in 3G/4G/LTE/Sim card • Internet sharing/tethering ✓✓ (Any 2)		2
4.10	• Communicate with other learners. • Collaborate with other learners. • Create study groups. • Send information to other learners, etc. ✓✓ (Any 2)		2
4.11	• Anonymity • Accessibility (any time of the day or night) • Behaviours that they might not do face-to-face (disinhibition) • Fear reporting bullying incidents • Bystanders. ✓✓ (Any 2)		2
4.12	• Touchscreen devices have limited buttons that will possibly break after 3 – 4 years • Touchscreen devices usually have more simple user interfaces • Bigger screen (no need for keyboard) • Easy to clean, some are even dirt, dust and grease resistant • Good for training: helping more people get used to using computers • Serves the function of both mouse and keyboard • Allows natural input such as drawing, gestures, (swiping, pinching) ✓✓ (Any 2)		2
			[25]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

5.1	• Home network or home area network (HAN) ✓ • To facilitate communication inside or within the close vicinity of a home. ✓		2
5.2	• Lower cost than a telephone call • Cost is the same irrespective of the distance • Can be used on a wide variety of devices • Geographical mobility • Video can be used during the call • Additional functionality of software e.g files sharing capability of Skype, etc. ✓✓ (Any 2)		2
5.3	• Bandwidth refers to the total amount of data that can be transferred from one point to another in a given period✓ • Broadband refers to high speed, high bandwidth connection to the internet. ✓		2
5.4	• It is an additional piece of software that gives a web browser more functions, ✓ • Java / Adobe Acrobat Reader (for .pdf files)/ Microsoft Silverlight (to run rich media, databases, and interactive web pages)/ Adobe Flash Player (to run .swf animation movies and YouTube videos)/. Apple Quicktime (to see 3d Virtual Reality schematics) Etc... ✓(Any one)		2
5.5.1	• Uncapped means that there is no limit ✓placed on the amount of data that can be uploaded or downloaded in a specific period. ✓	2	6
5.5.2	• Unshaped adsl gives you maximum speeds/no prioritised services✓ at all times ✓ (in contrast, shaped connections give 'preference' or priority to certain Internet services)	2	
5.5.3	• You can access your data from any location that has Internet access, • Including via mobile devices such as smartphones. • Saves storage space on your local machine or device as the data is stored online. • It is easier to share data across devices. ✓✓ (Any 2)	2	

5.6	It is a central hardware device which connects to the server and then directs 'traffic' or data ✓ from the server to the appropriate computer.		1
			[15]

QUESTION 6: INFORMATION MANAGEMENT

6..1	- Data can be moved from one application to another without retyping the data ✓ - An example is when you export data from a spreadsheet to a table in a database. ✓ (accept any other suitable answer)		2
6.2.	- Bibliography is a reference list (in alphabetical order) of everything you used in the research and preparation of a paper or project. ✓ - Citation is when you quote someone or something out of a book or website. ✓		2
6.3	A podcast is an audio file ✓ (often in an MP3 format) that is made available to download from the Internet ✓		2
6.4	- Check credentials/affiliation of the author/organisation running the website - Establish how recent/current the information is/Check when it was last updated - Cross-reference with other sources - Check objectivity/bias with other sources - Look at the general presentation, e.g. spelling errors - Frequency which the source has been cited ✓✓ (Any two)		2
6.5	Copyright ✓		1
6.6	- Graphs - Functions - Formulae, etc. ✓ (Any one)		1
			[10]

QUESTION 7: SOCIAL IMPLICATIONS

7.1	• Take regular breaks. • Use ergonomically designed equipment. • Sit comfortable with the correct posture. • Work in a well-lit and well ventilated room, etc. (Any two✓✓)		2
7.2	• Call on a recycling company to take care of it • Dump in dedicated bins in supermarkets ✓(Any one)		1
7.3	• Do not throw it in the rubbish bin/dump ✓		1
7.4	• No one is allowed to look at other people's work. • No use of Internet during working hours. • No infecting of computers with viruses, • Etc. ✓✓ (Any two)		2
7.5 1	• It is the forgery of an e-mail header✓so that the e-mail appears to be from a different origin (or person) ✓	2	4
7.5 2	• Process where a single idea or business practice ✓is funded by multiple small donations from volunteer contributors, usually before the business venture is started. ✓ The contributors will then receive the product when it is finally put into production.	2	
			[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1.1	Notepad, Notepad ++, (any 1) ✓ (Accept Komodo or other valid response)		1
8.1.2	- Line 3: Heading should read as H1 - Line 6-9: should have and for each point - Line 10: No closing tag for unordered list - Line 17: No closing HTML tag </html> - Line 16: No opening tag for </body> ✓✓ (Any two)		2
8.1.3	- Ordered list is numbered. ✓ - Unordered list is bulleted. ✓		2
8.2.1	- Vlookup - Nested IF ✓ (Any one)	1	3
8.2.2	Conditional formatting ✓ [Also accept Sorting or Creating a bar/column chart]	1	
8.2.3	- Difficulties with sorting - There may not be consistency in terms of use/positioning of comma - Cannot easily see which names/surnames might be missing, ✓ (Any one)	1	
8.3	- All changes made to the document by reviewers are visible. - Multiple reviewers can edit the document - Author can decide which changes to accept or reject - Can view changes per reviewer - Can view what final document would like before accepting changes, etc. ✓✓ (Any two)	1 1	2
8.4	- Add a bookmark to the explanation of this word in the Glossary. ✓ - Add a hyperlink on the on the word Pinterest which links to the bookmark you created ✓		2
8.5	In the report footer ✓		1
8.6	=COUNT ✓ ([Gender]) ✓		2
			[15]

TOTAL SECTION B: 75

SECTION C**QUESTION 9: INTEGRATED SCENARIO**

9.1.1	• 500GB ✓	1	7
9.1.2	• 8GB ✓	1	
9.1.3	• Celeron chips have less cache memory than Pentium • Celeron chip is slower than Pentium chip • Celeron has slower bus speeds • Celeron is cheaper than a Pentium ✓✓ (Any two)	2	
9.1.4	• System software ✓	1	
9.1.5	• Provide a GUI • Provide basic security • Provide basic file handling • Platform to install utilities/apps • Control input and output devices • Allows users to make/receive calls, etc. ✓✓ (Any two) (Note to marker: Accept specific examples.)	2	
9.2	Video editing and animation software requires: • higher processing power (CPU) • higher-end graphics cards • more storage space ✓✓ (Any two)		2
9.3	• more portable, i.e. easier to demonstrate to people while walking around • smaller to carry around • can use gestures (tablet feature) instead of keyboard and mouse / touchpad ✓✓ (Any two)		2
9.4.	• Monitor is bigger - 24" (better viewing) • Faster refresh rate (144 mHz) • Has extra ports (HDMI/DVI-D) • Better to avoid eye strain (ergonomically design) • Etc. ✓✓✓ (Any three)		3
9.5.1	• Adjust settings (contrast, brightness, etc.) ✓	1	

9.5.2	• Sound is muted (turned off) – turn back on • Sound is turned down (too soft to hear) – increase volume • Speaker is damaged (unlikely, but possible) – test a different speaker • Software problem (driver did not load at bootup) – reboot PC ✓ (Any one)	1	2
9.6.1	• Ubuntu12.10✓	1	3
9.6.2	• No guarantee of quality or that it works correctly. • Often only available from the Internet. • Not as widely used. • Documentation and support for open source software may not be easy to access, etc. ✓✓ (Any two)	2	
9.7.1	• Mobility • Cap/Data use • Coverage/Availability • Speed of connection • Cost ✓✓ (Any two)	2	
9.7.2	• Permanent connection. • You can make calls and receive calls and use the line for Internet access at the same time. • Most ADSL modem routers have Wi-Fi access ✓✓ (Any two)	2	8
9.7.3	• mail services for sending emails to interested parties • Real time services: instant messages to stake holders • VOIP: for Video conferencing such as Skype • Cloud computing: storage of data/photos, back-up, etc. • Etc. (Award ONE mark for service✓ and ONE mark for corresponding function✓) x 2 ✓✓	4	
9.7.4	• Information-sharing: careers, bursaries available, • Stats SA - careers • Educational publications • Government web sites – vacancies, • Skills Portal • Etc. ✓✓ (Any two)	2	
9.8.1	• A type of malware / destructive program ✓ • disguised as a useful application ✓	2	

9.8.2	Move the file to a special area of the disk, where it can no longer be a danger to other data or software on the disk✓	1	3
9.9.1	- Easier and faster for respondent to choose options. - Easier to capture on a computer / to enter. - Irrelevant / vague / unnecessary answers can be eliminated. - Answers can be restricted to meet goal of questionnaire. - Easier to process. ✓✓ (Any two)	2	
9.9.2	- validation rule - input mask - default value - drop-down box - indexing (i.e. disallowing duplicate entries) ✓✓ (Any two)	2	6
9.9.3	- More functions available - Charting facilities available - Spreadsheet designed to work with numbers - Easier and quicker to test 'what-if' scenarios - Can use conditional formatting, etc. ✓✓ (Any two)	2	
9.10.1	- Braille keyboard - Large-key keyboards (Accept only INPUT devices, not screen magnification devices, etc.) ✓ (Any one)	1	2
9.10.2	- Eye tracking devices - Head movement devices - Large-key keyboards - Large trackballs - Joysticks - Foot pedal control devices - Sip-and-puff devices, etc. (Accept only INPUT devices, not screen magnification devices etc.) ✓ (Any one)	1	
9.11.1	Safer, user do not have to carry cash/money on him/her ✓	1	
9.11.2	QR codes: - carry information both vertically and horizontally - have more information stored - have information in a smaller space - can be read in 360° /from more angles	2	3

	• can be read by multiple devices ✓ (Any one)		
9.12.1	• Facebook • Twitter • LinkedIn • Pinterest • Google Plus+ • Tumblr • Instagram • Flickr • Etc. ✓✓ (Any two)	2	
9.12.2	• Wider audience • More cost effective than traditional methods of marketing • Instantaneous • Interactive /Customers can even leave messages ✓✓ (Any two)	2	
9.12.3	• Exposure to questionable activities such as pornography/etc. • Posting provocative pictures and videos • Easy access for predators and online harassment • Excessive or addictive access /health concerns • Access to unhealthy “groups” • Encouraging poor grammar, usage, and spelling • The spread of misinformation ✓✓ (Any two) Precautions by school: • Block access social networking sites /(Accept examples of software) • Ensure security is installed on computers/such as a firewall • Awareness of rules of netiquette (accept any other valid answer) ✓ (Any one)	3	7

TOTAL SECTION C: 50

GRAND TOTAL: 150