



SEPTEMBER TRIAL EXAMINATION

GRADE 12

**COMPUTER APPLICATIONS TECHNOLOGY P2
SEPTEMBER 2013**

MARKS: 150

TIME: 3 hours

This exam paper consists of 12 pages

INSTRUCTIONS AND INFORMATION

1. This question paper consists of SECTIONS A and B.
2. Answer ALL the questions.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. Leave a blank line after EACH sub-question.
6. Do NOT write in the right-hand margin.
7. In general, a mark is allocated per fact. A 2-mark question would therefore require TWO facts, etc.

SECTION A**QUESTION 1: MATCHING ITEMS**

Choose a term/concept from COLUMN B that matches the description in COLUMN A. Write only the letter (A–R) next to the question number (1.1–1.10) in the ANSWER BOOK, for example 1.11 S.

COLUMN A		COLUMN B	
1.1	Device seen as a convergence of technologies.	A	Adware
1.2	A hardware device used to record and transmit low resolution video.	B	Green Computing
1.3	An on-line journal with new entries appearing in sequence as they are written, often dealing with opinions or reflections.	C	Scanner
1.4	Software supported by advertisements.	D	Smartphone
1.5	The speed at which a computer can send or receive information.	E	Cloud Computing
1.6	Sharing of resources offered as a service over the Internet.	F	Operating System
1.7	System software designed to help analyse, configure, optimize or maintain a computer.	G	Input mask
1.8	A word processing feature where changes made by different people to the same document can be viewed, accepted or rejected.	H	Webcam
1.9	Database features used to ensure the correct format of data is input by the user.	I	Bits
1.10	The use of computer resources in an eco-friendly and efficient way to minimise negative impact on the environment.	J	Track changes
		K	Data validation
		L	Blog
		M	footnote
		N	Utility Software
		O	Kbps
		P	Bytes
		Q	Vlog
		R	Skype

(10 x 1)
[10]

QUESTION 2: MULTIPLE-CHOICE QUESTIONS

Various options are given as possible answers to the following questions. Choose the most appropriate answer and write only the letter (A–D) next to the question number (2.1–2.10) in the ANSWER BOOK, for example 2.11 D

- 2.1 A message that a file is *Read-Only* is most likely caused by.....
A. a file that has been corrupted.
B. a file that has been saved to a CD.
C. a file that has been saved to a flash drive.
D. a file that has been encrypted. (1)
- 2.2 Proprietary software is software that ...
A. is completely free.
B. needs a licence to be bought in order to use it.
C. can be copied freely from the legal owner of the software.
D. can be shared with friends. (1)
- 2.3 Which ONE of the following refers to software used by an operating system to communicate with a device such as a printer?
A Keylogger
B Driver
C Cookie
D Firewall (1)
- 2.4 Which one of the following websites does NOT require a password, username or PIN in order to access it?
A. Wikipedia
B. Facebook
C. An Internet banking site
D. Twitter (1)
- 2.5 Which one of the following refers to a technology that allows you to determine your current location via satellite?
A ADSL
B 4G
C GPS
D GPRS (1)
- 2.6 Which one of the following terms does NOT logically belong with the others?
A Intel
B Microsoft Office
C Encarta
D Open Office (1)
- 2.7 Which one of the following can NOT be used as a data source for a mail merge?
A A database table
B A table in a word processing document
C A web page (1)

D A spreadsheet

2.8 Which one of the charts below would be the most appropriate to display the percentage contribution of items in a household budget?

- A Column chart
- B Line chart
- C Bar chart
- D Pie chart

(1)

2.9 Which one of the following is the correct search string to find all the jpg files in a folder?

- A jpg*.*
- B *.jpg
- C *.*
- D ?????.jpeg

(1)

2.10 Which one of the following statements concerning Bluetooth is FALSE?

- A Bluetooth technology is often used to connect a wireless keyboard or mouse
- B Bluetooth technology is used to transmit data wirelessly over short distances
- C Bluetooth communication is completely secure and it is safe to allow your device to connect to any other Bluetooth device without any PINs or Passkeys
- D Bluetooth technology is often used to set up Personal Area Networks or PANs

(1)

(10)

SECTION A: SUBTOTAL [20]

SECTION B

The scenario below sets the scene for the questions that follow.

ABC Computers has partnered with several stakeholders to tackle the issue of unemployment and initiated a project to provide community members with ICT skills. For this purpose they have started a computer training centre.

QUESTION 3

Ms Kay, one of the teachers at the training centre received the following specifications of a laptop for her use:

ULTRABOOK

Intel Core i5 / 2.6GHz w / 3M Ultra Low Voltage CPU
 8GB DDR3-1333 RAM
 32GB mSATA SSD
 Embedded Gigabit Ethernet
 Built-in 4-in-1 Card Reader
 Embedded 802.11 b/g/n Wireless LAN and Bluetooth 3.0
 Intel 3D High Definition Audio, Built-in Speaker & Microphone
 2 x USB2.0, 1 x USB3.0, 1 x HDMI, Multi Gesture Touch Pad
 Li-Polymer Battery (6cell / 3000 mAh) & Charger
 Microsoft Windows 8 32-bit
 14" 1920×1080 display
 Embedded nVidia GeForce GT-640M W/1GB DDR3 Support DirectX 11



- 3.1 Ms Kay noticed SSD among the specifications.
- 3.1.1 What does SSD stand for? (1)
- 3.1.2 How does it compare to a normal hard drive? (2)
- 3.2 The word 'embedded' appears more than once in the advertisement. What does 'embedded' mean with regard to hardware specifications? (2)
- 3.3 3.3.1 Name TWO ways in which Ms Kay would use the HDMI port in the computer centre? (2)
- 3.3.2 Name another device on which you could also find an HDMI port? (1)
- 3.4 Ms Kay wants to get a new 3 TB HDD but is unsure if the hard drive is large enough for backups.
- 3.4.1 How many Gigabytes are there in 3 Terabytes? (1)
- 3.4.2 Name TWO types of files (data) that normally take up a lot of storage space. (2)

- 3.5 3.5.1 Give an example of volatile memory from the advertisement. (1)
 3.5.2 Why is this type of memory called volatile? (1)
- 3.6 ABC Computers wants to implement lab access control for the staff.
 3.6.1 Name a biometric input device they could consider. (1)
 3.6.2 Explain the term 'biometric'. (2)
- 3.7 3.7.1 Name the software technique that allows users of the computer centre to send documents to one printer at the same time. (1)
 3.7.2 Explain how this technique works by referring to at least ONE of its characteristics. (1)
- 3.8 Students can enrol for courses at the computer centre with the help of an app from Google Play.
 3.8.1 Recommend a device suitable for this purpose. (1)
 3.8.2 Explain the reason for your choice in 3.8.1 above. (1)
- 3.9 Certificates for the large number of students need to be printed regularly.
 3.9.1 Name the type of printer that would be best suited for this. (1)
 3.9.2 Except the number of documents you are likely to print and the cost of replacing cartridges, name TWO other aspects you have to consider when buying a printer? Explain each of the aspects you mentioned. (4)
- 3.10 Ms Kay used her cell phone to take photos of the computer centre setup.
 3.10.1 Name TWO ways (methods) in which she can download the pictures onto her laptop by referring to the advertisement. (2)
 3.10.2 Explain the steps she would take with each method you have mentioned in 3.10.1 above. (4)

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QUESTION 4

- 4.1 Ms Kay was given the option of using an open-source operating system such as Linux.
- 4.1.1 What is an operating system? (2)
 - 4.1.2 Name TWO functions of an operating system. (2)
 - 4.1.3 Name TWO disadvantages of using open-source software rather than proprietary software. (2)
- 4.2 In the process of upgrading her current office suite Ms Kay is asked to enter an activation code.
- 4.2.1 Briefly explain what an 'office suite' is? (2)
 - 4.2.2 Name the general group of software that an office suite belongs to. (1)
 - 4.2.3 Where would Ms Kay find an activation code for her office suite? (1)
 - 4.2.4 Why do developers of software use activation codes? (1)
- 4.3 Plug-and-Play technology allows Ms Kay to install hardware without needing to install device drivers.
- 4.3.1 Explain what a 'device driver' is and what the function of a device driver is. (2)
 - 4.3.2 How does Plug-and-Play technology work in allowing the user not to have to manually install device drivers? (3)
- 4.4 The Windows utility, Disk Cleanup helps to free up space on your hard drive. List TWO ways in which the Disk Cleanup utility attempts to free up disk space. (2)
- 4.5 When Ms Kay's computer connects to the Internet the operating system automatically downloads and installs patches and updates for software, including for the operating system that is installed on her computer.
- 4.5.1 Give TWO reasons why it is a good idea to install updates for an operating system. (2)
 - 4.5.2 What is the difference between a 'patch' and a 'service pack'? (2)
- 4.6 Ms Kay is very worried about virus infections and has installed an antivirus program on her computer.
- 4.6.1 What is a virus? (2)
 - 4.6.2 Write down the general name for the group of software that viruses, worms and spyware belong to. (1)
 - 4.6.3 Name THREE possible signs of how Ms Kay will know if there is a virus on the computer. (3)

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QUESTION 5

- 5.1 The computers that will be used need to be connected to a network.
- 5.1.1 Mention TWO advantages to Ms Kay in having a network set up in the training centre. (1)
- 5.1.2 Which type of network will be most suitable for use in the training centre? (2)
- 5.2 A choice has to be made between connecting the network using cables and connecting it wirelessly. Give ONE advantage and ONE disadvantage of connecting the network wirelessly. (2)
- 5.3 ABC Computers decided to use the Internet to market the project and inform the community of events. They decided against a dial-up connection and investigate broadband options.
- 5.3.1 Give TWO factors (besides cost) that you would need to take into account when choosing a broadband Internet connection. (2)
- 5.3.2 Explain how dial-up connections differ from broadband connections in terms of how the user is charged. (2)
- 5.3.3 The broadband connection ABC Computers is interested in has two speed specifications; 4Mbps/512Kbps. What do the two different specifications refer to? (2)
- 5.4 ABC Computers is considering using Internet services such as VoIP and cloud computing.
- 5.4.1 Why is it more cost effective to use VoIP for making telephone calls? (2)
- 5.4.2 Name TWO disadvantages of VoIP compared to a normal telephone call. (2)
- 5.4.3 Apart from a computer, list any TWO hardware devices you will need for video conferencing using VoIP. (2)
- 5.4.4 Give an example of a popular software program that uses VoIP. (1)
- 5.4.5 Define the term 'cloud computing'. (2)
- 5.4.6 Give an example of a cloud storage facility. (1)
- 5.5 Ms Kay wants to make use of Internet banking for receiving financial donations for the computer training centre. She is worried about security issues such as identity theft.
- 5.5.1 Explain what identity theft is. (2)
- 5.5.2 Give TWO ways how an identity thief can get hold of Ms Kay's personal information? (2)
- 5.5.3 How can Ms Kay prevent identity theft from happening? (2)

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QUESTION 6

Ms Kay wants to make the students at the training centre aware of the impact of ICTs in the workplace.

- 6.1 Workers are using e-communication as a way to increase productivity.
- 6.1.1 What is a 'tele-worker' or 'telecommuter'? (2)
- 6.1.2 Name TWO forms of electronic communication and state for each form how it improved the way people worked. (4)
- 6.2 Many new careers emerged as a result of the impact of technology in the workplace.
- 6.2.1 Name TWO new careers in the field of education and training that started because of the use of ICTs. (2)
- 6.2.2 For each of the careers above, name ONE skill that needed to be developed in order to use ICTs for that career. (2)
- 6.3 E-communication made it easy for personal information of users to be shared.
- 6.3.1 Name TWO elements that would make up a user profile. (2)
- 6.3.2 What do you understand by the 'cloning' of a user's profile, especially on social networking sites? (1)
- 6.3.3 Name TWO ways in which ABC Computers can ensure that its staff's personal information is protected. (2)
- 6.3.4 Name TWO ways in which ABC Computers can monitor or track the whereabouts of its staff. (2)

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QUESTION 7

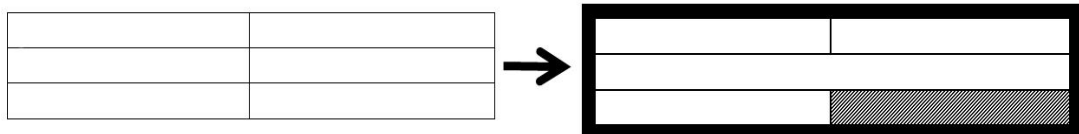
7.1 A word-processing document created on a computer at the computer centre displayed differently when opened on the laptop.

7.1.1 List TWO reasons that may have caused this. (2)

7.1.2 Suggest ONE way to ensure that anyone can view this document without the layout displaying differently. (2)

7.2 A document in landscape makes it inconvenient to read text on the page, because the lines look too wide horizontally. How would you address this problem without changing the font size? (1)

7.3 Refer to the diagrams below.



Some students needed help modifying the existing table on the left to look like the one on the right (excluding the arrow). Suggest precise steps in any appropriate sequence to achieve this. (8)

7.4 Ms Kay has created a spreadsheet with the data of some of the students attending the classes at the centre.

Study the extract from the spreadsheet below and answer the questions that follow.

	A	B	C	D	E	F	G
1	ICT SKILLS TRAINING						
2	Surname	Name	Course	Year started	Email address	Owns a PC	Password
3	Roux	Jan	Microsoft Word (Beginner)	2013	jan.roux@gmail.com	Y	jroux2013
4	Majoli	Thembi	Microsoft Excel (Intermediate)	2013		Y	tmajoli2013
5	Harper	Charlie	Microsoft Access (Beginner)	2013	charper@hotmail.com	N	charper2013
6	Galant	Sandy	Microsoft Word (Beginner)	2013	sandygaland@gmail.com	Y	sgaland2013
7	Smit	Jack	Microsoft Excel (Intermediate)	2013		N	jsmit2013

7.4.1 Which features of the spreadsheet program were used to:

7.4.1.1 Display the text over more than one column in row 1? (2)

7.4.1.2 Display the text below each other in cell D2? (2)

7.4.2 Which function will be used to:

7.4.2.1 Determine how many people own a PC? (2)

7.4.2.2 Determine the number of people who have email addresses? (2)

7.5

Surname	Name	Gender	Email	CellNo	Facebook	WhatsApp
Appel	Willem	M	Appelator@mailbox.co.za	0834712321	Y	N
Baatjies	Magda	F		0834712321	Y	Y
Moodley	Tiodan	M	TioMoodley@mweb.co.za	0720868712	N	N
Solute	Simba	M	SimbyS@gmail.com	0731138432	Y	N

Ms Kay created the above database with the contact details of people who made use of either WhatsApp or Facebook.

- 7.5.1 To which of the seven fields shown can a suitable default value be assigned? Briefly motivate your answer. (2)
- 7.5.2 Explain what a primary key is in the context of a database and comment on whether there is a suitable field as a primary key for this particular table. (2)
- 7.5.3 Give TWO reasons why an input mask would be used on a field such as the CellNo field. (2)

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TOTAL SECTION B:**130****GRAND TOTAL****150**