

Study Opportunities

June 2012

COMPUTER APPLICATIONS TECHNOLOGY

Grade 10

Paper 2 – Written question paper

Time: 2 hours

Total: 120

This question paper consists of 10 pages (including the front page)

Instructions and information

1. This paper consists of two sections: Section A (20 marks) and Section B (100 marks).
 2. Answer all the questions.
 3. Read the questions carefully, taking note of the number of marks allocated to each of the questions.
 4. Number the questions as given on the question paper.
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SECTION A

Question 1

Identify the correct answer for each question. Write down along the left side of your page only the *number* of each question, and next to it the single *capital letter* which represents the best answer, for example 1.11 A.

- 1.1 Which one of the following is NOT an example of hardware?
- A. Printer
 - B. Wireless mouse
 - C. Search engine
 - D. CPU
- (1)
- 1.2 Which one of the following statements is correct?
- A. Information refers to unprocessed items such as sets of numbers and amounts.
 - B. The process of input, processing, output and storage is called the information processing cycle.
 - C. Data is the result of the processing of information and should be useful and meaningful.
 - D. A learner's term marks is an example of information being input, where the computer processes the information and the output is a printed report (data).
- (1)
- 1.3 Which one of the following should one use to prevent two consecutive words (i.e. that follow one another) from being split over two lines?
- A. Page break
 - B. Hard space
 - C. Soft enter
 - D. Tab key
- (1)
- 1.4 Which one of the following mouse actions will present you with a list of relevant options to choose from?
- A. Double-clicking
 - B. Scrolling
 - C. Dragging
 - D. Right-clicking
- (1)

- 1.5 Which one of the following items is NOT an input device?
A. Speaker
B. Pointing stick
C. Trackball
D. Scanner (1)
- 1.6 Software can generally be divided into two main groups, namely:
A. Utility and Design software
B. System and Application software
C. Utility and Accessory software
D. Application and Plug-In software (1)
- 1.7 Which one of the following is an example of an open source operating system?
A. Office 365
B. Windows 7
C. Linux
D. Apple OS X (1)
- 1.8 Which company's products typically starts with a small letter 'i', as in 'iPad'?
A. Microsoft
B. Amazon
C. Intel
D. Apple (1)
- 1.9 Which one of the following examples of software does NOT logically belong with the others in terms of its function?
A. Internet Explorer
B. Skype
C. Google Chrome
D. Opera (1)
- 1.10 Which one of the following refers to the transfer of money between accounts using the Internet and Internet banking?
A. POS
B. EFT
C. OSS
D. ATM (1)

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Question 2

Write down along the left side of your page only the *number* of the question from Column A, and next to it the correct matching *capital letter* from Column B, for example 2.12 K.

| Column A | | Column B |
|----------|---|------------------------|
| 2.1 | Modules of memory that plug into slots on the motherboard of the computer | A. Menu B. CPU |
| 2.2 | A technology that uses small radio devices to handle data, and that may one day replace the use of bar codes | C. Ctrl+P D. Ctrl+V |
| 2.3 | A common file type associated with digital images | E. DIMMs F. rtf |
| 2.4 | Band of commands and functions, arranged in tabs and groups, and used in Office 2007 and Office 2010 applications | G. EULA H. GUI |
| 2.5 | A computer network spread over a wide geographical area | I. RAM J. jpeg |
| 2.6 | A type of interface that is presented to the user in a graphical way with small pictures called icons and other visual 'aids' | K. LAN L. OCR |
| 2.7 | Keystroke sequence that you can use to <i>paste</i> text that you have copied | M. PDF N. RFID |
| 2.8 | A file format developed by Adobe which is often used to distribute documents that generally do not require further editing | O. Ribbon P. DTP |
| 2.9 | A legally binding contract between the user and the software company, granting the use of their software under certain conditions | Q. Toolbar R. WAN |
| 2.10 | Software that takes a scanned image of text and converts it into text that can be edited in a word processor | S. MICR |

Section B

Question 3

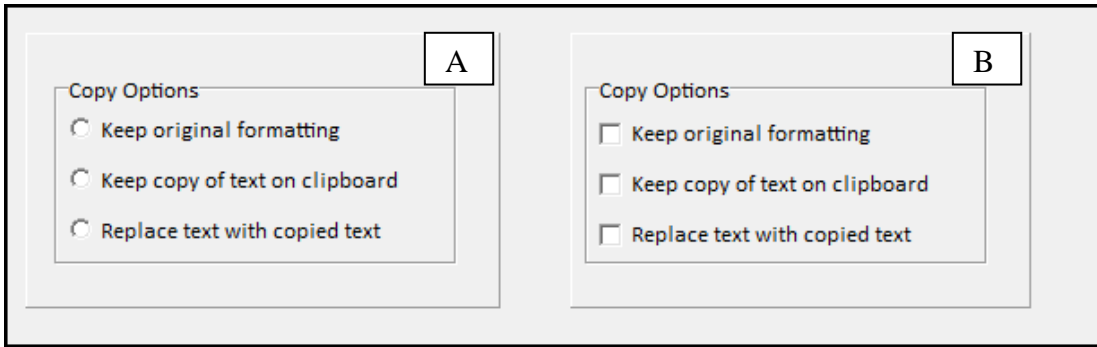
- 3.1 Some icons in *Word* are easy to figure what they represent, others are not so easy to 'guess'.
Give the name of the feature or property of an icon that can help you to determine what it 'does' or represents, and explain how you would access this feature. (2)
- 3.2 Your mother has the habit of just switching off her computer when she has finished working.
Comment on why this is not a good idea and briefly explain what she should do instead. (2)
- 3.3 Your sister accidentally deleted your 10-page Life Orientation project from your computer's hard drive at home.
- 3.3.1 Clearly explain how you would go about trying to get your project back without having to retype it. (2)
- 3.3.2 Comment on the changed scenario if the project had been deleted from your flash drive, and what options may be available to you then. (2)
- 3.4 Give TWO situations when one should use the 'Save as' option as opposed to the standard 'Save' option. (2)
- 3.5 Your dad wants to buy a new smartphone. He notes that one of the advertised specifications is 'full QWERTY'.
Clearly explain the meaning of this specification. (2)

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Question 4

- 4.1 Your sister was using Facebook when a message popped up saying that she must install a 'plug-in' to view the page.
Explain what a plug-in is and what it generally allows one to do. (2)
- 4.2 Your father says he loves using the Windows 7 operating system as it gives the latest weather forecast as soon as he logs on to his computer.
- 4.2.1 What is the general name given to this type of feature in Windows 7? (1)
- 4.2.2 Give ONE other example of this type of feature. (1)
- 4.3 Many users do not know which *operating system* they have on their computer, and are not even sure why they need one.
Give TWO reasons why an operating system is needed on a computer. (2)
- 4.4 Menu options sometimes have one of their letters underlined, such as Format.
- 4.4.1 Give ONE reason for this feature. (1)
- 4.4.2 Explain how this feature can be used, with specific reference to the above example, i.e. Format. (1)

4.5 Consider the following screenshot of two sets of Windows controls:



Both controls (A and B) give the user the same options.

Clearly explain the difference between these controls in terms of how they can be used.

(2)

4.6 Your mother complains that one of the programs on her computer keeps on crashing and then giving some long complicated error message. The technicians at her firm asked her to send them the error message in a *Word* document.

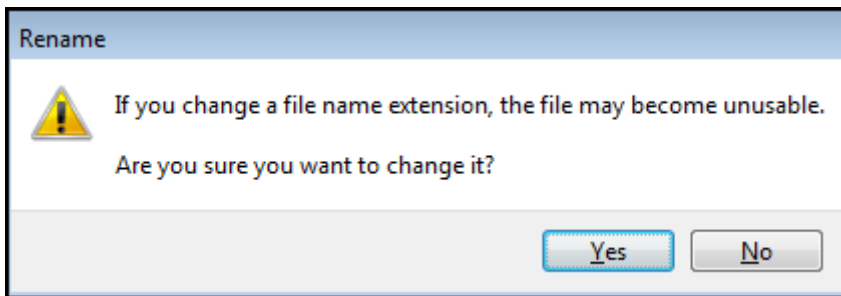
Explain how the *Word* document should be prepared, prior to being e-mailed to the technicians.

(2)

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Question 5

5.1 Your sister was renaming a file when the following message appeared:



Explain why changing a file name extension may cause the file to become 'unusable'.

(2)

5.2 Suppose that you have to retrieve the file **Budget.xlsx** in the following location:

F: \ Documents \ Invoices \ January \ Budget.xlsx

5.2.1 Give the term used to describe fully the location of a file, in this case

F: \ Documents \ Invoices \ January.

(1)

5.2.2 What do each of the words *Documents*, *Invoices* and *January* in the above example represent?

(1)

5.2.3 State which program would open, if you double-clicked this file in Windows Explorer.

(1)

5.3 Explain what it means to 'zip' a file and give ONE practical reason why you would want to 'zip' a file.

(2)

- 5.4 Your sister has a few questions about *shortcuts* on her computer desktop at school.
- 5.4.1 Briefly explain what a shortcut on the desktop represents. (1)
- 5.4.2 Give the general reason why we create these shortcuts. (1)
- 5.4.3 Your sister says that she copied a *Word* document shortcut to her flash drive to work on at home, but when she double-clicked the shortcut on her home computer, she received an error message. Explain to her why this happened, and what she should have done differently. (2)
- 5.5 Your father received a new laptop computer from his work. He was advised to set up and plan a folder structure.
- Give your father TWO tips on how to set up and plan a folder structure. (2)
- 5.6 Many users are not sure when to use the *copy* and when to use the *cut* option when using Windows Explorer.
- 5.6.1 Clearly explain the difference between these two options. (2)
- 5.6.2 The clipboard plays an important role in both the copy and the cut options. Explain why the clipboard does NOT play a role when you delete a file or a folder. (1)
- [16]**

Question 6

- 6.1 Open source software may be freely used, modified and distributed; however, there are some disadvantages associated with this type of software.
- 6.1.1 List TWO potential disadvantages associated with open source software. (2)
- 6.1.2 The support and documentation can be (and often is) charged for. What then is 'free' about this type of software? (1)
- 6.2 Your school wants to purchase a graphics design program and is investigating the possibility of a site licence.
- Briefly explain what a site licence is in this context. (2)
- 6.3 Give TWO features of an integrated software package such as Office 2010 that make the use of the various programs in it (e.g. word processor, spreadsheet) easy. (2)
- 6.4 Your mother purchased the Office 2010 suite. She is afraid that making a copy of the DVD on which it came may constitute *software piracy*.
- 6.4.1 Explain what is meant by software piracy. (1)
- 6.4.2 Give one acceptable reason whereby making a copy of the DVD would NOT be seen as software piracy. (1)

- 6.5 There is a lot of *shareware* available to download free from the Internet.
Give TWO practical reasons why you would in fact have to pay in order to keep a shareware program that you really liked. (2)
- 6.6 Give TWO reasons why it is critical to backup or make copies of files on a regular basis. (2)

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Question 7

- 7.1 Your father's firm is considering installing biometric security.
Explain what biometric security means, and support your answer with a suitable example. (2)
- 7.2 Your father wants to purchase a printer for home use and has been looking at *multi-function* printers.
- 7.2.1 Give TWO functions of multi-function printers besides printing. (2)
- 7.2.2 Give TWO advantages of multi-function printers, other than the fact that they offer more than one function. (2)
- 7.3 Give TWO reasons why *faxes* have largely been replaced by e-mail as the preferred means of communication and document transfer. (2)
- 7.4 Your mother notices that her new laptop has a *Blu-ray writer*.
Will she have to add a separate (portable) CD-drive to read and use the CDs she has? Briefly motivate your answer. (2)
- 7.5 Your father saw a 'built-in card reader' listed in an advert for a computer. He wants to know if this has something to do with credit cards.
- 7.5.1 Explain to him in general what a card reader allows one to do. (1)
- 7.5.2 Explain how you would connect a portable card reader to the computer (assuming that it is not built-in). (1)
- 7.5.3 Suggest one practical use for a card reader, in your daily life and interaction with a computer. (1)
- 7.6 Write a short paragraph on the CPU. Include in your discussion the basic function of the CPU, the unit in which its speed is measured, where you would find it inside the computer casing, and a short description of what a CPU looks like. (4)
- 7.7 Your father has learned to his surprise that RAM (Random Access Memory) and storage are both measured in the same unit, i.e. Gigabytes.
- 7.7.1 Explain why it is necessary for a computer always to have some RAM as well as storage space. (2)
- 7.7.2 Give TWO other differences between RAM and storage. Exclude in your answer any response that you may already have given in question 7.7.1 above. (2)

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Question 8

- 8.1 Your father's firm wants to install a local area network (LAN) at their offices.
- 8.1.1 Give TWO advantages of using a network in a business environment. (2)
- 8.1.2 Give TWO possible disadvantages of using a network in a business environment. (2)
- 8.2 What are the TWO main advantages of laptops, notebooks and netbooks over desktop computers? (2)
- 8.3 Computers in a network are usually connected to one or more servers.
- 8.3.1 Give ONE of the functions of a server in a computer network. (1)
- 8.3.2 Give TWO hardware specifications of servers that generally exceed the specifications of the other computers in the network. (2)
- 8.4 Your mother came across the term *green computing* in a magazine, and she approaches you for an explanation.
- 8.4.1 Explain to her what the term green computing means. (1)
- 8.4.2 Give her TWO practical tips on how to contribute to green computing. (2)
- 8.5 Your father spends long hours in front of his computer, and someone has suggested that he may be exposing himself to the risk of RSI.
- 8.5.1 Explain what the risk of RSI entails, or means. (Do not merely expand the acronym.) (1)
- 8.5.2 Give your father one tip to lessen the risk of RSI, apart from taking regular breaks from the computer. (1)

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Question 9

- 9.1 Your sister performed a *find and replace* operation in *Word* on her school project. She intended to replace the word *cat* with *dog* throughout the document.
- However, when she looked again, she was dismayed to discover that a number of words had been changed incorrectly. For example *catalogue* had become *dogalogue* and *Muscat* had become *Musdog*.
- 9.1.1 Explain why other words like *catalogue* and *Muscat* had mistakenly been changed to *dogalogue* and *Musdog*. (1)
- 9.1.2 Explain what your sister should have done during the *find and replace* operation in order to prevent such a problem. (1)
- 9.2 Your mother complains that when she performs a spell check on her documents it always queries the word *colour* and suggests the spelling *color*, which she knows is wrong.
- 9.2.1 Explain to her why this is happening. (1)
- 9.2.2 Suggest what she can do to prevent this from happening in the future. (1)

9.3 Whenever your mother wants a heading to start at the top of a new page in a word processing document, she always presses the *Enter* key until the heading appears at the top of the next page.

Explain why this is not a good approach or solution, and describe what she should be doing instead.

(2)

9.4 Your father is trying to computerise the family budget, and sets up a table in *Word* showing the monthly income and expenses. He now wants to perform some calculations on these figures.

Give TWO reasons, in terms of the *use of functions and formulas*, why it would have been better to perform this task in a spreadsheet like *Excel*.

(2)

9.5 Consider the following screenshot of a spreadsheet:

| | A | B | C | D | E |
|---|----|----|---|---|---|
| 1 | 12 | | | | |
| 2 | 23 | 35 | | | |
| 3 | 16 | | | | |
| 4 | | | | | |
| 5 | | | | | |

Write down the resulting formula (not the answer) that would appear in the formula bar for cell B3, if the formula in cell B2 were copied to cell B3.

(2)

9.6 Consider the following screenshot of a spreadsheet that a teacher set up to convert his learners' marks for a test out of 25 to percentages:

| | A | B | C | D |
|---|-------------|----------|---|---|
| 1 | Mark / Punt | % | | |
| 2 | 20 | 8000.0% | | |
| 3 | 16 | 6400.0% | | |
| 4 | 15 | 6000.0% | | |
| 5 | 19 | 7600.0% | | |
| 6 | 18 | 7200.0% | | |
| 7 | 21 | 8400.0% | | |
| 8 | 24 | 9600.0% | | |
| 9 | 25 | 10000.0% | | |

Explain why the incorrect answers are being produced, and outline a method to fix this problem.

(2)

[12]

TOTAL : 120