

Study Opportunities

November 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)

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 an example of hardware?
A. Hardcopy
B. Driver
C. Plug-in
D. RAM (1)
- 1.2 Which one of the following places the networks listed in increasing order of size (from smallest to biggest)?
A. PAN, WAN, HAN
B. HAN, LAN, WAN
C. LAN, WAN, HAN
D. PAN, WAN, LAN (1)
- 1.3 Which one of the following terms describes a person who uses malware to gain control of your computer, in order to attack other computers online?
A. Zombie
B. Hacker
C. Botnet operator
D. Phisher (1)
- 1.4 Which one of the following is an example of the correct use of netiquette?
A. Typing an e-mail in capital letters so that it is easier to read.
B. Keeping e-mail attachments under 10 GB.
C. Replying to an e-mail with the original message still visible for the original sender of the message to see.
D. Posting embarrassing photos of your friend on Facebook. (1)
- 1.5 The process whereby anti-virus software places a virus in a safe area of the disk so that it cannot affect the computer is known as
A. arresting the virus.
B. quarantining the virus.
C. spoofing the virus.
D. scanning the virus. (1)

- 1.6 Which one of the following statements is true?
- A. 3G is an option to connect to the Internet for mobile users.
 - B. ADSL connections can only be used with Netbook computers.
 - C. Vodacom, Cell-C and MTN sell ADSL connections to the public.
 - D. ADSL connections do not need any extra hardware to connect to the Internet whereas 3G connections require very expensive additional hardware. (1)
- 1.7 Which one of the following refers to programs that reproduce themselves so they take up your entire computer's available memory or hard disk space?
- A. Drivers
 - B. Trojans
 - C. Multipliers
 - D. Worms (1)
- 1.8 Clicking on the home page while using your web browser will take you to the
- A. Google website.
 - B. web page of your ISP.
 - C. web page that always opens first when the web browser is opened.
 - D. last web page you viewed. (1)
- 1.9 An attempt to infiltrate a user's PC so that the user is automatically redirected to another (fake) website, even if the correct address for that website is typed in, is called...
- A. phishing.
 - B. pharming.
 - C. spoofing.
 - D. spamming. (1)
- 1.10 If the 'Back' button in your web browser is greyed out, it means that ...
- A. your browser has stopped working properly.
 - B. you may have a virus.
 - C. you have too many websites open and you need to close some.
 - D. you are on the first page you visited in the current browsing session. (1)

[10]

Question 2

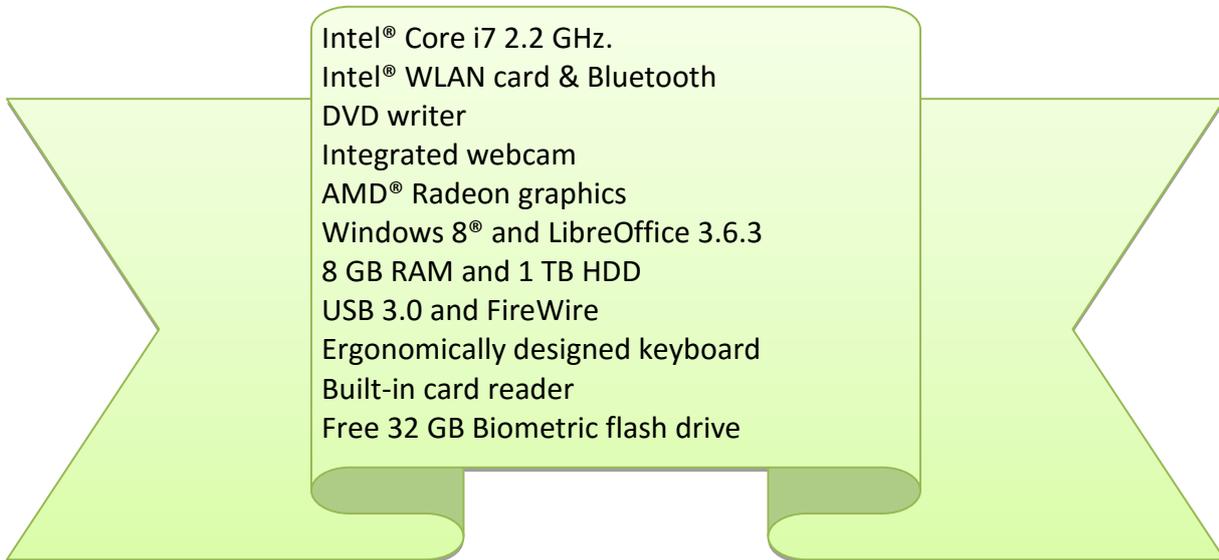
Write down along the left side of your page only the *number* of the question from Column A, and next to it the correct matching *capital letter* from Column B, for example 2.12 K.

Column A		Column B
2.1	The language in which web pages are written	A. https B. MP3
2.2	Name given to a class of injuries resulting from fast, repetitive work	C. URL D. Ctrl+V
2.3	A common file type associated with digital graphics or images	E. HTML F. 3G
2.4	Part of a website address that would indicate that it is a secure website	G. Ctrl+P H. IM
2.5	A technology that enables a machine to read characters such as bank account numbers on a cheque	I. EULA J. JPG
2.6	Live text-based communication usually between two people using computers or other devices such as a cellphone	K. ICT L. ADSL
2.7	A keystroke sequence that you can use to obtain a hardcopy version of a document	M. GUI N. RFID
2.8	An interface used by virtually all modern software	O. RSI 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. 🖨 + P R. WWW
2.10	A permanent digital connection to the Internet using a telephone line	S. MICR

Section B

Question 3

Consider the advert for a computer and answer the questions that follow:



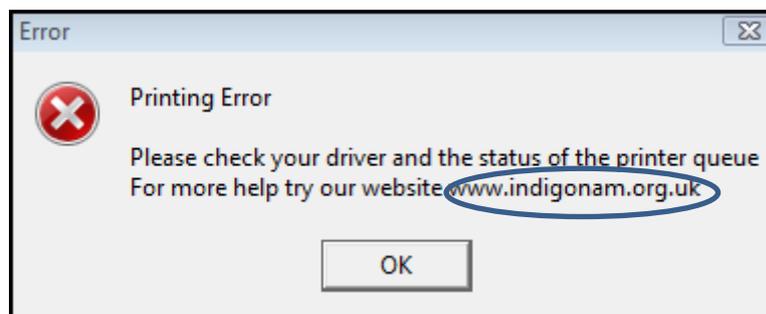
- 3.1 What is the speed of the *processor* listed in the advert? (1)
- 3.2 Give the size, in gigabytes, of the *hard drive* listed in the advert. (1)
- 3.3 How much *memory* does this computer have? (1)
- 3.4 Clearly explain the difference between *memory* and *storage* in terms of their respective functions. (2)
- 3.5 Many users do not know why they need to have an *operating system* on their computer.
- 3.5.1 What operating system is listed in the advert? (1)
- 3.5.2 Give TWO reasons why an operating system is needed on a computer. (2)
- 3.6 There is no *monitor* listed in the advert.
- Give the specification of a monitor that most users would be interested in, and also give the unit in which this specification is measured. (2)
- 3.7 The keyboard in the advert is listed as an *ergonomically* designed keyboard.
- 3.7.1 Explain what is meant by the term *ergonomics*. (1)
- 3.7.2 Suggest ONE feature of the keyboard that would qualify it as 'ergonomically designed'. (1)
- 3.7.3 Give TWO other tips on how to prevent the health risks associated with prolonged use of a computer, apart from the use of ergonomically designed equipment. (2)

- 3.8 An *open source* package is listed in the advert.
- 3.8.1 Give the name of the open source package listed in the advert. (1)
- 3.8.2 List TWO potential disadvantages of open source software over proprietary software. (2)
- 3.9 A *DVD writer* is listed in the advert.
- Give ONE reason why it is an advantage to have a DVD writer instead of a CD writer. (1)
- 3.10 Briefly describe TWO ways in which you could transfer photos from a digital camera to this specific computer based on the specifications of the computer. (2)
- 3.11 The advert lists a free '*biometric*' flash drive.
- 3.11.1 Explain what the term biometric or biometrics means and what it is used for. (2)
- 3.11.2 Briefly explain how a biometric flash drive would differ from other flash drives in terms of users accessing the drive. (1)
- 3.12 Most ports on a computer are *plug-and-play* compatible.
- 3.12.1 Name the port in the advert that is specifically associated with video input e.g. from a digital video recorder. (1)
- 3.12.2 Briefly explain what the term plug-and-play means and why it is of benefit to a user. (2)
- 3.13 The computer is advertised as having *USB 3.0*.
- 3.13.1 Explain what is meant by *USB* on a computer. (1)
- 3.13.2 What advantage would the USB 3.0 specification hold over USB 2.0? (1)

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Question 4

- 4.1 Your sister was printing her assignment when the following error message popped up.



- 4.1.1 Explain in detail how she could send this error message (exactly as it appears) electronically to someone at the website indicated.
Mention in your answer any software she might need to use. (3)
- 4.1.2 Give TWO facts one can deduce ('figure out') from the address of the website:
www.indigonam.org.uk (2)
- 4.1.3 Give the general term for the type of application software used to view and explore web pages, and name one specific example of this software, i.e. the program name. (2)
- 4.1.4 Explain what a *driver* is and the role it performs in the operation of a computer. (2)
- 4.1.5 Explain what a *printer queue* is and the role it performs in printing. (2)
- 4.2 One of the best ways to explore a new version of software is to look at the *tooltips*. Briefly explain what tooltips are and how they can be accessed. (2)
- 4.3 A CAT teacher advises her class always to 'right-click' if they get stuck, and if that does not help, to try *F1*.
- 4.3.1 Explain why 'right-clicking' can assist users when they need help. (2)
- 4.3.2 Why would 'F1' be of assistance to users when they need help? (2)
- 4.4 A *search engine* is a program used to search for documents on the WWW by using keywords entered by the user.
- 4.4.1 Give ONE example of a search engine, apart from Google. (1)
- 4.4.2 Search engines sometimes yield either too few results, or (more often) too many results. Give TWO tips that can be used for effective searching on the Internet. (2)
- 4.5 The 'Save As' command can be used to rename a file or save a file in a different location (folder or disk).
Give TWO other situations when one should use the 'Save as' option as opposed to the standard 'Save' option. (2)
- 4.6 *Freeware* and *shareware* are often both classified as 'free' software.
Explain in detail the differences between shareware and freeware. (4)

4.7 An extract from an e-mail that a friend received is shown below:

Dear Client, Attention!

Your online Internet banking access has been limited.
As part of our privacy measures to regularly screen activities,
we detected unusual changes to your online access.

[Continue here.](#)

Once you log in, you will be provided steps to reactivate it.
We thank you for your prompt attention to this mater.

- 4.7.1 What is the general term given to describe this kind of e-mail? (1)
- 4.7.2 What is the general term given to the (blue) underlined text in the e-mail? (1)
- 4.7.3 Briefly describe what would most likely happen if you followed the instructions given in the e-mail. (2)
- 4.7.4 Give TWO general features or characteristics of these types of e-mails that would enable your friend easily to 'recognise' or 'spot' them in the future. (2)

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Question 5

5.1 A friend says he updates his *virus definitions* once a year, in order to save on his '*cap*'. Give brief but clear explanations of each of the following:

- 5.1.1 What is a computer virus? (2)
- 5.1.2 What are virus definitions? (1)
- 5.1.3 Why is updating virus definitions once a year not a good idea? (1)
- 5.1.4 What is a *cap* in this context? (2)

5.2 *ISP-based e-mail* is becoming less popular, while *Instant Messaging* and *web-based e-mail* systems such as Gmail are becoming more and more popular.

- 5.2.1 Besides any cost-related issues, what is the main advantage of web-based e-mail systems over ISP-based e-mail systems? (1)
- 5.2.2 What is the main difference between Instant Messaging (IM) systems and e-mail? (1)
- 5.2.3 Briefly explain what an ISP is, and the role that it performs. The meaning of the abbreviation is not required. (2)

[10]

Section C

Question 6: Integrated Scenario

Your mother has been given finance from a small business development agency to set up a business which she will run from home.

- 6.1 Give TWO general ways in which ICTs can help entrepreneurs such as your mother get their businesses off the ground, apart from the handling of general office administration. (2)
- 6.2 One of the conditions under which your mother received the finance was that she has to actively practise *green computing* in her business.
- 6.2.1 Briefly explain what green computing is. (2)
- 6.2.2 Give TWO ways in which she could contribute to green computing, besides saving on paper. (2)
- 6.3 One of your mother's first decisions is to buy a printer. She has a choice between a *laser printer*, an *ink-jet printer* and a *multi-function printer*.
- 6.3.1 Besides costs, give TWO criteria or questions she would need to answer in order to decide between an ink-jet and a laser printer. (2)
- 6.3.2 Besides costs, give TWO benefits of buying a *multi-function printer* as opposed to a laser or an ink-jet printer in her situation. (2)
- 6.4 Your mother wants to network the computers and equipment in her home office. She was told she would need UTP cabling, *NICs* and a *switch*.
- 6.4.1 Give TWO broad benefits of establishing a network for her business in this context. (2)
- 6.4.2 Briefly explain why she would need NICs and a switch to establish the network by referring to the function of these two components. (2)
- 6.5 A representative from the small business development agency phoned your mother. She said that she had sent a *zipped* set of *PDF* files covering all the legal agreements of their financial assistance to her boss, and had 'CC-ed' your mother.
- 6.5.1 What means was used to send the files to your mother? (1)
- 6.5.2 Explain what 'CC' means in this context (you are not required to write down what the letters stand for). (2)
- 6.5.3 Explain what the term 'zipped' means in this context and the reason why the files may have been 'zipped'. (2)
- 6.5.4 Give TWO reasons why PDF files may have been used in this context. (2)

6.6 A colleague set up a spreadsheet for your mother. An extract of this spreadsheet is shown below:

	A	B	C	D	E
1	Cost per unit				R 23.50
2	Name	Quantity purchased	Price	VAT	Total
3	Brandt, Jan	2	R 47.00	R 6.58	R 53.58
4	Savuka, Xolani	20	#####	R 65.80	R 535.80
5	Brandt Tiffany	5	#####	R 16.45	R 133.95
6	Gerber Chesnee	8	#####	R 26.32	R 214.32

6.6.1 What cell formatting features were used to format cell A1 and the contents of the cell? (2)

6.6.2 Briefly explain why some of the cells display hash signs (#####), and outline how you would solve this problem. (2)

6.7 Consider the following extract from a document your mother is working on:

.....**The following herbs were selected for our wonder garden:**.....Section Break (Continuous).....

<p>Sweet Basil – in food, pastas, salads and grows into a beautiful green shrub with small white flowers. Also get a peach coloured variant that makes a nice contrast. Prefers full sun and soil rich in compost. ¶</p> <p>Rosemary – in food, dark green shrub with small blue flowers. (Stimulant, and can help us to lose weight.) Prefers full sun and soil rich in compost. ¶</p>	<p>Lavender – smells divine, makes potpourri. Bake lavender shortbread biscuits, use in bath water and it will calm you. Use in herbal pillow for wonderful night's sleep. Different leaf shapes, grey to lilac and different flowers. Nice variety. Prefers full sun and soil rich in compost. ¶</p>	<p>Thyme – small ground cover type plant. Excellent in meat dishes. Prefers full sun and soil rich in compost. Different fragrances and leaf colours. ¶</p> <p>Parsley – very popular but must be planted in a pot or own bed and must be newly planted every year. ¶.....Section Break (Continuous).....</p>
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.....Column Break.....

6.7.1 Your mother wishes to follow the link in the second column, without leaving *Word*. What should she do? (Give the keystrokes and/or mouse clicks required). (1)

6.7.2 Point out the mistake that was made in positioning the heading, and describe what needs to be done to correct it. (3)

6.7.3 You will note that certain words have been 'split' over two lines, making the text easier to read. What is the name of this feature in *Word*? (1)

[30]

TOTAL : 120