



SEPTEMBER TRIAL EXAMINATION

GRADE 12

**COMPUTER APPLICATIONS TECHNOLOGY P2
SEPTEMBER 2015**

MARKS: 150

TIME: 3 hours

This exam paper consists of 13 pages

INSTRUCTIONS AND INFORMATION

1. This question paper consists of SECTIONS A, B and C.
2. Answer ALL the questions.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question (QUESTION 1, 2, 3, et cetera) on a NEW page.
5. Leave a blank line after EACH sub-question.
6. Do NOT write in the right-hand margin of the ANSWER BOOK.
7. In general, a mark is allocated per fact. A 2-mark question would therefore require TWO facts, et cetera.
8. Please read each question carefully before answering it.

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–S) next to the question number (1.1–1.10) in the ANSWER BOOK, for example 1.11 T.

COLUMN A		COLUMN B
1.1	A device that can be used to provide power in the event of an electricity failure.	A. Cellspacing
1.2	Small programs, specifically designed for mobile devices that are usually downloaded from the Internet.	B. Apps
1.3	An attribute used to specify the distance between text and the cell border.	C. Track Changes
1.4	Users are tricked into clicking on a webpage element acting as a concealed link.	D. Properties
1.5	ADSL and 3G are both examples of this type of Internet connection.	E. Icon
1.6	A word processing feature where changes made by different people to the same document can be viewed, accepted or rejected.	F. Pharming
1.7	Additional information about a document, such as the name of the author.	G. Footnote
1.8	A database feature that helps prevent users from entering incorrect data in a database table.	H. BYOD
1.9	Using material developed by other people without acknowledging them.	I. Piracy
1.10	A policy that allows employees to connect their own devices to the company network and do their official work on these devices.	J. Validation rule
		K. Cloud computing
		L. Metadata
		M. Cellpadding
		N. Power Supply Unit
		O. Click-jacking
		P. Plagiarism
		Q. Broadband
		R. UPS
		S. Default value

[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), for example 2.11 D.

2.1 Which ONE of the following is a output device?

- A) Web camera
- B) Earphones
- C) Flash drive
- D) Data projector (1)

2.2 Which ONE of the following arranges the devices below from least powerful to most powerful?

- A) ultrabook, netbook, tablet
- B) netbook, ultrabook, tablet
- C) ultrabook, tablet, netbook
- D) tablet, netbook, ultrabook (1)

2.3 Which ONE of the following services is NOT an example of online storage:

- A) Google Drive
- B) OLX
- C) Sky Drive
- D) Dropbox (1)

2.4 Which ONE of the following types of graph is the most appropriate for presenting trends over a period of time?

- A) Line chart
- B) Pie chart
- C) Column chart
- D) Bar chart (1)

2.5 Which ONE of the following refers to a technology where the processing power of multiple networked computers is combined to perform a specific task?

- A) Grid computing
- B) Green computing
- C) File sharing
- D) Mobile computing (1)

- 2.6 Which ONE of the following statements about word processing is FALSE?
- A) The appearance of text is easy to change.
 - B) A header is the title of the document.
 - C) One can start on a new page before the existing page is filled.
 - D) Tabs are characters that are usually wider than a space. (1)
- 2.7 The specification 802.11b/g/n in an advertised PC means that the computer ...
- A) has a Thunderbolt port for high speed data transfer.
 - B) can be connected to a cabled network.
 - C) is fitted with a Solid State Drive.
 - D) has built-in support for Wi-Fi. (1)
- 2.8 Which ONE of the following is an example of a popular e-reader?
- A) iPad
 - B) Notebook
 - C) Phablet
 - D) Kindle (1)
- 2.9 Which ONE of the following roles does a computer assume when it connects to a server?
- A) Firewall
 - B) Client
 - C) Storage
 - D) Server (1)
- 2.10 Which ONE of the following refers to a type of network that one would find in a school computer lab?
- A) GPS
 - B) LAN
 - C) ISP
 - D) NIC (1)

[10]

QUESTION 3: TRUE/FALSE ITEMS

Indicate whether each of the following statements is TRUE or FALSE. Write 'true' or 'false' next to the question number (3.1–3.5). If the statement is FALSE, change the underlined word(s) to make the statement TRUE. Write only the appropriate word(s) next to the question number.

EXAMPLE:

QUESTION	ANSWER
The <u>digital divide</u> is characterised by unequal access to ICT by different groups of people.	True
Computer program instructions are executed by the <u>RSS</u> .	False – CPU

- 3.1 A **modem** is a smaller version of a tablet that has the calling functionality like that of a cellphone.
- 3.2 **RSS feeds** deliver content updates when new information is published.
- 3.3 **MySpace** is a microblogging service that initially let its users send messages of 140 characters long.
- 3.4 The shortcut **Ctrl+S** is commonly used for pasting text that you have copied or cut.
- 3.5 A **query** is used to collect data from a group of people.

[5]

TOTAL SECTION A: [25]

SECTION B**QUESTION 4: SYSTEM TECHNOLOGIES**

- 4.1 Explain what the term convergence means and give a suitable example of it. (3)
- 4.2 State TWO possible ways in which a problem with a mouse not responding can be solved. (2)
- 4.3 What is a SOHO user? (1)
- 4.4 Briefly explain the difference between disk fragmentation and defragmentation. (2)
- 4.5 Software is kept up-to-date through patches and service packs.
- 4.5.1 What is a software 'bug'? (1)
- 4.5.2 Briefly explain the difference between a patch and a service pack by describing their features. (2)
- 4.6 What is the danger of having your data stored only in RAM? (1)
- 4.7 State TWO ways in which ICT has improved accessibility to people all over the world? (2)
- 4.8 A web-based application uses resources hosted on a remote server.
- 4.8.1 Give TWO advantages of a web-based application as opposed to a desktop application installed on your computer. (2)
- 4.8.2 Give an example of a web-based office suite? (1)
- 4.9 List TWO possible technologies a tablet can use to connect to the Internet. (2)
- 4.10 List TWO advantages of using social networking sites. (2)
- 4.11 Give TWO characteristics of cyber-bullying. (2)
- 4.12 State TWO advantages of using a touchscreen. (2)

[25]

QUESTION 5: NETWORK AND INTERNET TECHNOLOGIES

- 5.1 Explain what is referred to as a HAN. (2)
- 5.2 Give TWO advantages of using VoIP instead of a normal telephone call. (2)
- 5.3 Explain the difference between broadband and bandwidth? (2)
- 5.4 Explain what a browser plug-in is by referring to an example. (2)
- 5.5 Look at the advertisement for an ADSL package with the following specifications:

- **4 Mbps / 512 Kbps uncapped ADSL**
- **Unshaped for normal web browsing, email, online banking and social network services**
- **Free 5GB cloud storage**

- 5.5.1 What does uncapped mean? (2)
- 5.5.2 What does the term unshaped mean in this context? (2)
- 5.5.3 Name TWO advantages of cloud computing. (2)
- 5.6 What is a network switch? (1)

[15]**QUESTION 6: INFORMATION MANAGEMENT**

- 6.1 Explain what is meant by the term export with regard to data and give a suitable example of how it can be used. (2)
- 6.2 Differentiate between a bibliography and a citation. (2)
- 6.3 Briefly explain what a podcast is. (2)
- 6.4 Name any TWO ways you would use to check the reliability or accuracy of information from an Internet source. (2)
- 6.5 What laws protect the unethical practice of copying intellectual property? (1)
- 6.6 Give ONE aspect of a spreadsheet that can be used to manipulate data. (1)

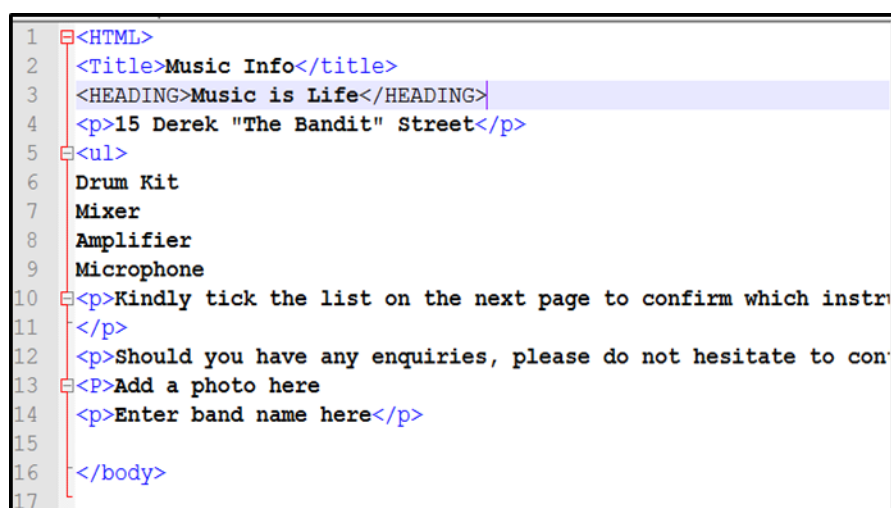
[10]

QUESTION 7: SOCIAL IMPLICATIONS

- 7.1 Mention TWO ways in which one can minimise the possibility of being affected by computer-related health risks. (2)
- 7.2 Suggest ONE eco-friendly way of disposing of old computer. (1)
- 7.3 Name ONE way in which we should NOT dispose of an old computer. (1)
- 7.4 List TWO possible items that can be included in the AUP for your school network. (2)
- 7.5 Explain what is meant by
- 7.5.1 Spoofing. (2)
- 7.5.2 Crowd funding. (2)

[10]**QUESTION 8: SOLUTION DEVELOPMENT**

- 8.1 Consider the screenshot below, and answer the questions that follow.



```
1 <HTML>
2 <Title>Music Info</title>
3 <HEADING>Music is Life</HEADING>
4 <p>15 Derek "The Bandit" Street</p>
5 <ul>
6 Drum Kit
7 Mixer
8 Amplifier
9 Microphone
10 <p>Kindly tick the list on the next page to confirm which instr
11 </p>
12 <p>Should you have any enquiries, please do not hesitate to con
13 <p>Add a photo here
14 <p>Enter band name here</p>
15
16 </body>
17
```

- 8.1.1 Name an application program suitable for creating HTML files. (1)
- 8.1.2 Identify TWO problems in the HTML code shown in the screenshot above.
Write down the line number and then state the problem. (2)
- 8.1.3 Line 5 contains the instruction for an unordered list.
Briefly explain what an unordered list is compared to an ordered list. (2)
- 8.2 A teacher prepares pupils' exam marks in a spreadsheet. The symbols A, B, C, D, etc. corresponding to the marks in column B, must be displayed in column C.

A	B	C
Name	Percentage	Symbol
Adams, John	65	
Baloyi, Maite	73	
Crowe, Peter	91	

- 8.2.1 Give the name of a spreadsheet function that could be used in column C to display these corresponding symbols. (1)
- 8.2.2 Which spreadsheet feature could be used to allow one to see at a glance which mark represented an 'A' symbol? (1)
- 8.2.3 Explain why it is NOT a good idea to store the name and surname of the pupils in one column, as is currently the case. (1)
- 8.3 State TWO advantages of using the 'Track Changes' feature of a word processing program. (2)
- 8.4 Describe in general terms, without giving the actual mouse clicks required, how you would set up the following navigation in a long Word document:
- When you click on the word 'Pinterest' you must 'jump' to its explanation in the Glossary at the end of the document. (2)
- 8.5 In which part of a database report would you include a function? (1)
- 8.6 Write out the function you would use in a database report to determine the number of records in, for example, the Gender field. (2)

[15]

SECTION C**QUESTION 9: INTEGRATED SCENARIO**

Please read the scenario below and answer the questions that follow:

The school has asked your Grade 12 class to organise an electronic information desk as part of your career expo. Three networked computers will be used. The programme includes demonstrations of video editing and animation projects that the CAT pupils have been developing.

9.1 A computer with the following specifications was donated to the school:

Intel Celeron 2.4 GHz CPU
8GB DDR RAM
500GB HDD
16x DVD RW
17" LCD Monitor
Ubuntu 12.10
USB Optical Mouse
2 year guarantee

- | | | |
|-------|---|-----|
| 9.1.1 | What is the capacity of the hard drive listed in the advert? | (1) |
| 9.1.2 | How much RAM does the device in the advert have? | (1) |
| 9.1.3 | Give TWO differences between a Celeron and a Pentium chip. | (2) |
| 9.1.4 | Is Ubuntu application or system software? | (1) |
| 9.1.5 | List TWO functions of Ubuntu. | (2) |
| 9.2 | Explain, with reference to the scenario, why entry-level computers may NOT be suitable to use for the information desk. | (2) |
| 9.3 | Describe TWO possible advantages of using a tablet instead of a laptop or desktop computer in this situation. | (2) |

- 9.4 Give THREE reasons why a monitor with the following specifications would be a better option to use than the one in the advert. Explain your answer.

24" Full HD 1920x1080
144Hz 1ms Display
Port HDMI DVI-D
Ergonomic Back-lit LED

(3)

- 9.5 There were some problems in setting up the data projector for a slide presentation. Consider the following problems and write down ONE possible solution for each:

9.5.1 The image displayed on the screen was too dim to be seen properly, even though the room was sufficiently darkened. (1)

9.5.2 There was no sound from the speakers, even though they were switched on and plugged into the correct jack. (1)

- 9.6 The organisers want to save money by using free and open source software (FOSS).

9.6.1 Identify the open source software mentioned in the advert. (1)

9.6.2 List TWO disadvantages of using FOSS. (2)

- 9.7 The computers will also be connected to the Internet.

9.7.1 Mention TWO criteria to consider when choosing the type of Internet connection to be used. (2)

9.7.2 List TWO possible advantages of using an ADSL Internet connection instead of 3G. (2)

9.7.3 Except for normal browsing, name TWO examples of Internet services that can be used for the career expo and state what these services can be used for. (4)

9.7.4 Name any TWO government Internet-based services that the school can include as part of the career expo. (2)

- 9.8 A virus alert popped up stating that a 'Trojan' had been detected on one of the computers.

9.8.1 Explain what a 'Trojan' is in this context. (2)

9.8.2 An option was given to quarantine the file.

Briefly explain what 'quarantine' means in this context. (1)

- 9.9 The visitors to the career expo have been asked to complete a survey.
- 9.9.2 Give TWO reasons why it is generally better to use closed questions when designing a questionnaire. (2)
- 9.9.2 Give TWO field properties or features in a database table that could be used to ensure that the data captured is valid and accurate. (2)
- 9.9.3 Give TWO reasons why a spreadsheet may be better suited to analyse the results of a survey rather than a database. (2)
- 9.10 The school would like to consider visitors with disabilities who may attend the career expo. Suggest an input device that could be used to help people who suffer from:
- 9.10.1 Poor eyesight (1)
- 9.10.2 Poor motor control (stiff joints, arthritis etc.) (1)
- 9.11 Visitors to the career expo can purchase brochures from the information desk. They can however only pay via SnapScan.
- The image shows the SnapScan logo, which consists of a blue square with a white QR code icon and the text 'SnapScan' in white. Below the logo is a black and white QR code. Above the QR code, the text 'SCAN THE CODE TO PAY WITH YOUR PHONE' is written in a small, sans-serif font.
- 9.11.1 What is the major advantage of paying via an application like SnapScan? (1)
- 9.11.2 Give TWO advantages of using a QR-code instead of the conventional bar code. (2)
- 9.12 The school want to advertise the career expo on social networking to attract more visitors.
- 9.12.1 Give TWO examples of social networking websites (2)
- 9.12.2 State TWO advantages for the school to advertise on a social networking website (2)
- 9.12.3 Name TWO 'dangers' that the learners must look out for when engaging on social websites (apart from cyber bullying) and state what precaution the school can take to 'protect' the learners. (3)

[50]**TOTAL: [150]**