SMARTWIZ

GRADE11 COMPUTER APPLICATIONS TECHNOLOGY (CAT) EXAM

MARKS: 100

MARKS	

TIME: 2 HOURS

SCHOOL _____

CLASS (eg. 4A) _____

SURNAME _____

NAME _____

Instructions for Learners:
• Read all instructions carefully before you begin the exam.
• Write your full name and student number clearly on the answer sheet/book.
• Answer all questions unless otherwise instructed.
• Show all your work/calculations where necessary.
• Write neatly and clearly.
• Use only a blue or black pen. Do not use correction fluid or tape.
• Electronic devices (calculators, cell phones, etc.) are not allowed unless explicitly permitted.
• Raise your hand if you have any questions.
• Do not talk to other learners during the exam.
• Any form of cheating will result in immediate disqualification from the exam.

This exam consists of five pages, including the cover page.

SECTION A: MULTIPLE CHOICE QUESTIONS (20 marks)

Choose the correct answer and write the letter next to the question number.

1.1 Which of the following is NOT a feature of an Operating System?
A) File management
B) Memory management
C) Internet browsing
D) Task scheduling
_____ (1)

1.2 What is the main purpose of a URL in web browsing?
A) To provide the location of a web page
B) To protect the website from viruses
C) To store data temporarily
D) To send emails
_____ (1)

1.3 Which type of software helps users create and edit text documents?
A) Word processing software
B) Spreadsheet software
C) Presentation software
D) Database software
_____ (1)

1.4 What does the acronym 'HTTP' stand for?
A) HyperText Transfer Protocol
B) Hyperlink Transfer Process
C) Hyper Transfer Text Program
D) High Transfer Text Protocol
_____ (1)

1.5 Which device is used to convert digital documents into physical copies?
A) Scanner
B) Printer
C) Monitor
D) Modem
_____ (1)

1.6 What type of memory is non-volatile and stores the computer's firmware?
A) RAM
B) ROM
C) Cache
D) Hard Drive
_____ (1)

1.7 Which of the following is NOT an example of cloud computing?
A) Google Docs
B) Microsoft OneDrive
C) USB flash drive
D) Dropbox
_____ (1)

1.8 Which of these is used to identify a computer on a network?
A) IP address
B) URL
C) DNS
D) HTML
_____ (1)

1.9 What is the main function of spreadsheet software?
A) Create presentations
B) Organise and calculate data
C) Edit photos
D) Write code
_____ (1)

1.10 Which of the following is a common web browser?
A) Microsoft Word
B) Mozilla Firefox
C) Adobe Photoshop
D) Excel
_____ (1)

SECTION B: MATCHING QUESTIONS (20 marks)

Match the items in COLUMN A with the correct description in COLUMN B. Write the letter next to the question number.

COLUMN A	COLUMN B
2.1 URL	A) Stores the computer's firmware
2.2 ROM	B) Website address
2.3 Firewall	C) Temporary memory used for programs
2.4 RAM	D) Protects network from unauthorized access
2.5 Backup	E) Copy of data stored separately for safety

2.1 _____

2.2 _____

2.3 _____

2.4 _____

2.5 _____

SECTION C: LONG QUESTIONS (60 marks)

QUESTION 3

3.1 Define the term *software*. Explain the difference between *system software* and *application software*. Give one example of each.

(6)

3.2 What is an IP address? Explain why it is important in networking.

(6)

3.3 Describe three common file formats used for images and state one characteristic of each.

_____
_____
_____
_____

(6)

_____

3.4 Explain what malware is and describe three types of malware that can affect a computer.

_____
_____
_____
_____

(6)

_____

3.5 What is meant by the term *data encryption*? Why is encryption important for online communication?

_____
_____
_____
_____

(6)

_____

3.6 Explain how cloud storage works and list two advantages of using cloud storage.

_____
_____
_____
_____

(6)

_____

3.7 Describe the difference between *hardware* and *software* troubleshooting. Provide one example of each.

_____
_____
_____
_____

(6)

3.8 List and explain three different types of software updates.

(6)

3.9 Describe the purpose of a database and explain how databases improve data management.

(6)

3.10 Explain the use of templates in word processing software and describe two benefits of using templates.

(6)

END OF EXAM

TOTAL : 100

MEMO

SECTION A: MULTIPLE CHOICE QUESTIONS (20 marks)

1.1 C) Internet browsing
1.2 A) To provide the location of a web page
1.3 A) Word processing software
1.4 A) HyperText Transfer Protocol
1.5 B) Printer
1.6 B) ROM
1.7 C) USB flash drive
1.8 A) IP address
1.9 B) Organise and calculate data
1.10 B) Mozilla Firefox

SECTION B: MATCHING QUESTIONS (20 marks)

2.1 B) Website address
2.2 A) Stores the computer's firmware
2.3 D) Protects network from unauthorized access
2.4 C) Temporary memory used for programs
2.5 E) Copy of data stored separately for safety

SECTION C: LONG QUESTIONS (60 marks)

3.1 Software:

- Software is a set of instructions that tells a computer what to do.
- System software manages the computer hardware and system operations (e.g., Operating System).
- Application software performs specific user tasks (e.g., Microsoft Word).

3.2 IP address:

- A unique numerical label assigned to each device on a network.
- Important for identifying and communicating with devices over the internet or networks.

3.3 Image file formats:

- JPEG: Compressed format, good for photos but loses some quality.

- PNG: Supports transparency and lossless compression.
- GIF: Supports animations and limited to 256 colors.

3.4 Malware:

- Malicious software designed to damage or gain unauthorized access.
- Types include viruses (infect files), spyware (collects data), and ransomware (demands payment).

3.5 Data encryption:

- The process of converting data into a code to prevent unauthorized access.
- Important for securing sensitive information during online communication.

3.6 Cloud storage:

- Data stored on remote servers accessed via the internet.
- Advantages: Access from anywhere, automatic backups.

3.7 Troubleshooting:

- Hardware troubleshooting involves physical fixes (e.g., replacing a faulty hard drive).
- Software troubleshooting involves fixing software problems (e.g., reinstalling an application).

3.8 Software updates:

- Security updates: Fix vulnerabilities.
- Feature updates: Add new features.
- Bug fixes: Correct errors in software.

3.9 Database:

- An organized collection of data that allows easy access, management, and updating.
- Improves data management by reducing duplication and enabling quick retrieval.

3.10 Templates in word processing:

- Pre-designed document layouts for consistent formatting.
- Benefits: Saves time and ensures professional-looking documents.

TOTAL : 100