SMARTWIZ

GRADE 12 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 dishonesty will result in immediate disqualification from the exam.

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

📘 SECTION A: Multiple Choice Questions (20 × 1 = 20 marks)

Write only the letter (A–D) next to the question number.

1. Which device stores data permanently even when the computer is switched off?
   A. RAM
   B. ROM
   C. Hard Drive
   D. CPU
   Answer: _____
2. Which application software is best suited for managing numeric data?
   A. Microsoft Word
   B. Microsoft PowerPoint
   C. Microsoft Excel
   D. Microsoft Outlook
   Answer: _____
3. Which one is a **wired** communication method?
   A. Wi-Fi
   B. Bluetooth
   C. Fibre optics
   D. Infrared
   Answer: _____
4. What type of malware disguises itself as legitimate software?
   A. Worm
   B. Spyware
   C. Trojan Horse
   D. Ransomware
   Answer: _____
5. Which protocol is used to send email?
   A. HTTP
   B. SMTP
   C. FTP
   D. HTML
   Answer: _____
6. The main function of an **ISP** is to:
   A. Protect your computer from viruses
   B. Connect your device to the internet
   C. Store personal data
   D. Run operating systems
   Answer: _____
7. What is the function of an operating system?
   A. Creates documents
   B. Manages hardware and software resources
   C. Runs antivirus scans
   D. Connects you to a website
   Answer: _____
8. Which one is NOT a peripheral device?
   A. Monitor

B. CPU
C. Printer
D. Mouse
Answer: _____

9. Which file extension indicates a Microsoft Word document?
   A. .xlsx
   B. .pptx
   C. .docx
   D. .mdb
   Answer: _____

10. What is a network made up of computers in a small geographical area called?
    A. WAN
    B. MAN
    C. LAN
    D. PAN
    Answer: _____

11. What is a benefit of using a spreadsheet?
    A. Automatically spell checks essays
    B. Creates professional email layouts
    C. Performs calculations using formulas
    D. Designs slide presentations
    Answer: _____

12. Which term describes the illegal copying of software?
    A. Plagiarism
    B. Software piracy
    C. Freeware
    D. Malware
    Answer: _____

13. What is the purpose of a firewall?
    A. Speed up downloads
    B. Block spam emails
    C. Prevent unauthorized access to a network
    D. Enhance hardware performance
    Answer: _____

14. Which of the following is an example of a spreadsheet function?
    A. =ADD()
    B. =TOTAL()
    C. =SUM()
    D. =JOIN()
    Answer: _____

15. What does GUI stand for?
    A. General User Interface
    B. Graphic User Information
    C. Graphical User Interface
    D. General Utility Interface
    Answer: _____

16. Which storage is fastest in terms of data access speed?
    A. Optical Disc
    B. Flash Drive

    C. Solid State Drive (SSD)
    D. Hard Disk Drive (HDD)
    Answer: _____
17. What is a phishing scam?
    A. A virus that deletes data
    B. A fake message that tricks you into sharing personal info
    C. Software that fixes spelling errors
    D. A fake antivirus program
    Answer: _____
18. In email communication, what does CC stand for?
    A. Copy Complete
    B. Copy Communication
    C. Carbon Copy
    D. Contact Category
    Answer: _____
19. What is ergonomics in computing?
    A. Design of networks
    B. Data processing methods
    C. Efficient and safe workplace design
    D. Advanced hacking techniques
    Answer: _____
20. Which one is NOT an output device?
    A. Printer
    B. Monitor
    C. Speaker
    D. Webcam
    Answer: _____

📘 SECTION B: Definitions & Terminology (25 marks)

Write full sentences. 5 marks per question.

1. Define the term **database** and give one example of a database application.
   Answer:

2. What is an **IP address** and why is it important in networking?
   Answer:

3. Explain what a **spreadsheet formula** is, and provide an example.
Answer:

4. What does the term **software license** mean? Mention one type.
Answer:

5. Describe **cloud storage** and list two benefits of using it.
Answer:

📘 SECTION C: Short Answer Questions (30 marks)

Answer the following in full sentences. Marks as indicated.

1. (4 marks) List **two input devices** and explain how each is used.
Answer:

   -
   -

2. (6 marks) Compare **desktop computers** and **laptops**. Mention 3 differences.
Answer:

3. (5 marks) Explain how antivirus software helps protect a computer system.
Answer:

_____

_____

_____

4. (5 marks) State the difference between **hardware** and **software**. Provide one example of each.
Answer:

_____

_____

_____

5. (5 marks) Describe the impact of poor ergonomics on computer users and suggest two improvements.
Answer:

_____

_____

_____

6. (5 marks) Discuss the ethical use of computers in schools. Mention one example of misuse.
Answer:

_____

_____

_____

📘 SECTION D: Scenario-Based Question (25 marks)

Read the scenario and answer the questions that follow.

Scenario:
Lebo is a Grade 12 learner who uses her computer to complete schoolwork, access Google Drive for storing files, and send emails. She recently received a strange email asking her to "confirm her bank login details."

Answer the following:

1. (5 marks) What should Lebo do after receiving this suspicious email?
Answer:

_____

_____

2. (5 marks) Name two ways Lebo can protect her computer from viruses.
   Answer:

   - _____
   - _____

3. (5 marks) Explain how **cloud storage** helps Lebo with her schoolwork.
   Answer:

   _____

   _____

4. (5 marks) Identify one advantage and one disadvantage of using email for communication.
   Answer:
   Advantage: _____
   Disadvantage: _____
5. (5 marks) Why is it important for Lebo to use strong passwords online?
   Answer:

   _____

   _____

   _____

📌 **TOTAL: 100 MARKS**

MEMO

✅ SECTION A: Multiple Choice (1 mark each × 20 = 20 marks)

1. C
2. C
3. C
4. C
5. B
6. B
7. B
8. B
9. C
10. C
11. C
12. B
13. C
14. C
15. C
16. C
17. B
18. C
19. C
20. D

Total: 20 marks

✅ SECTION B: Definitions & Terminology (5 × 5 = 25 marks)

Award full marks only for complete and accurate responses. Partial marks may be given for partially correct answers.

1. **Database:** A structured collection of data that can be accessed and managed using database software.
   Example: Microsoft Access or MySQL.
   [5 marks]
2. **IP Address:** A unique number assigned to a device connected to a network, allowing it to be identified and communicate with others.
   Importance: Enables routing of data to and from the correct devices.
   [5 marks]
3. **Spreadsheet formula:** An instruction used in spreadsheet software to perform calculations (e.g., `=SUM(A1:A5)`).
   [5 marks]

4. **Software license:** A legal agreement that defines how software can be used.
   Type: Examples – End-User License Agreement (EULA), open-source license.
   [5 marks]
5. **Cloud storage:** A method of storing data on remote servers accessed via the internet.
   Benefits: Access files from anywhere; reduces need for physical storage.
   [5 marks]

✅ SECTION C: Short Answer Questions (30 marks)

1.

- **Keyboard** – used to input text.
- **Mouse** – used to navigate and select items on screen.
  [2 marks per device = 4 marks]

2.

- **Portability** – laptops are portable; desktops are not.
- **Power Source** – laptops use batteries; desktops use constant power.
- **Size** – laptops are compact; desktops are bulky.
  [6 marks]

3.

- Antivirus software scans files for known threats.
- It prevents malicious code from executing.
- Helps detect and remove viruses, trojans, and worms.
  [5 marks]

4.

- **Hardware** – physical parts of a computer (e.g., mouse).
- **Software** – programs/instructions (e.g., Microsoft Word).
  [5 marks]

5.

- **Poor ergonomics** can cause eye strain, back pain, RSI.
- **Improvements:** use adjustable chairs, place screen at eye level.
  [5 marks]

6.

- Ethical use involves respecting privacy, avoiding cyberbullying, and not copying work.
- **Example of misuse:** copying someone's assignment (plagiarism).
  [5 marks]

✅ SECTION D: Scenario-Based Questions (25 marks)

1.

- Do not click on links.
- Report and delete the email.
- It's likely a phishing scam.
  [5 marks]

2.

- Install/update antivirus.
- Avoid downloading from unknown sources.
- Do regular scans.
  [2.5 marks each = 5 marks]

3.

- Cloud storage allows access from any device.
- Auto-backup prevents data loss.
- Saves space on local device.
  [5 marks]

4.

- **Advantage:** Fast and reliable communication.
- **Disadvantage:** Risk of spam or phishing.
  [5 marks]

5.

- Strong passwords prevent unauthorized access.
- Reduces chances of hacking and identity theft.
  [5 marks]

✅ TOTAL: 100 MARKS