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 $(20 \times 1 = 20 \text{ marks})$

Choose the correct letter (A–D) and write it on the line provided.

| 1. | What does PDF stand for? |
|----|--|
| | A. Private Document Format |
| | B. Public Document File |
| | C. Portable Document Format |
| | D. Processed Data Form |
| | Answer: |
| 2. | Which of the following is an output device? |
| | A. Scanner |
| | B. Mouse |
| | C. Monitor |
| | D. Keyboard |
| | Answer: |
| 3. | Which software would be used to create a database? |
| | A. Excel |
| | B. Access |
| | C. PowerPoint |
| | D. Word |
| | Answer: |
| 4. | Which option describes Open Source Software ? |
| | A. You pay monthly for updates |
| | B. It's free and modifiable |
| | C. Sold with copyright only |
| | D. Needs internet to function |
| | Answer: |
| 5. | Which of the following is a Boolean data type ? |
| | A. 55.2 |
| | B. True |
| | C. John |
| | D. 1998 |
| | Answer: |
| 6. | A gigabyte (GB) is approximately: |
| | A. 100 kilobytes |
| | B. 1 000 000 bytes |
| | C. 1 000 megabytes |
| | D. 1 000 terabytes |
| | Answer: |
| 7. | What is the main purpose of a router? |
| | A. To store files |
| | B. To connect devices to a network |
| | C. To display graphics |
| | D. To edit documents |
| | Answer: |
| 8. | A macro in Excel is used to: |
| | A. Sort data |

| B. Enter text C. Record and automate tasks D. Draw charts Answer: 9. Which is an example of a strong password? A. 123456 B. catdog C. Pa\$\$w0rd!23 D. username Answer: 10. What is the purpose of an ISP? A. Runs your operating system B. Provides internet access C. Controls viruses D. Encrypts files Answer: | |
|--|---|
| (10 more multiple choice questions follow) | |
| Write complete answers. Marks are indicated per question. 1. (4 marks) Define the term phishing and give two ways to identify a phishing email. Answer: | |
| 2. (6 marks) Compare RAM and ROM in terms of: Volatility Purpose Data storage | _ |
| 3. (4 marks) State two reasons why people use cloud storage. Answer: | _ |

| 4. (6 marks) Briefly explain the term data validation and provide an example of it in use in Exc. Answer: 5. (5 marks) List three ways to protect a computer from malware, and explain one. Answer: 6. (5 marks) Describe how a database helps an organization to manage information efficiently. Answer: | • | |
|---|----|--|
| 5. (5 marks) List three ways to protect a computer from malware, and explain one. Answer: lanation: 6. (5 marks) Describe how a database helps an organization to manage information efficiently. | 4. | Answer: |
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SECTION C: Visual Interpretation Question (10 marks)

Study the image below and answer the questions that follow:



| Questions: | | | | |
|------------|---|--|--|--|
| 1. | (2 marks) Identify two input devices shown in the image. Answer: | | | |
| • | | | | |
| 2. | (2 marks) Name one output device and one storage device in the image. Answer: | | | |
| • | Output: Storage: | | | |
| 3. | (2 marks) What is the function of the router in the image? Answer: | | | |
| 4. | (4 marks) Explain how a user could transfer files from the computer to the external drive. Answer: | | | |
| | MYST PATHWORKS | | | |
| | SECTION D: Ethics and Cybersecurity (15 marks) | | | |
| 1. | (5 marks) Define cyberbullying and explain one way it can affect learners. Answer: | | | |
| | | | | |
| 2. | (5 marks) Discuss the importance of digital citizenship for high school learners. Answer: | | | |
| | | | | |
| 3. | (5 marks) Name three ways to ensure ethical use of school computers. Answer: | | | |
| • | | | | |
| • | | | | |

TOTAL: 100 MARKS



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SECTION A: Multiple Choice $(20 \times 1 = 20 \text{ marks})$

- 1. C Portable Document Format
- 2. C Monitor
- 3. B Access
- 4. B − It's free and modifiable
- 5. B-True
- 6. C 1000 megabytes
- 7. B To connect devices to a network
- 8. C Record and automate tasks
- 9. C Pa\$\$w0rd!23
- 10. B Provides internet access

(Continue with 10 more MCQs if included – award 1 mark each)

Total: 20 marks

▼ SECTION B: Short Answer Questions (30 marks)

Award full marks for complete, relevant, and accurate responses. Use partial marking where appropriate.

- 1. **Phishing:** A cybercrime where fake emails are used to trick users into revealing personal info.
- Look for suspicious email addresses.
- Check for urgent requests or poor grammar. [4 marks]

2. RAM vs ROM:

- RAM: Volatile, temporary memory, used to store data being used currently.
- ROM: Non-volatile, permanent memory, stores firmware or BIOS. **[6 marks]**

3. Two reasons for cloud storage:

- Accessible from anywhere
- Reduces local storage needs [4 marks]
- 4. **Data validation:** A feature in Excel used to control the type of data entered into a cell. **Example:** Allowing only whole numbers from 1 to 10. **[6 marks]**

5.

- Use antivirus software
- Avoid unknown email attachments
- Keep software updated

Explanation example: Antivirus scans and removes malicious files before they cause damage. [5 marks]

6. Database advantages:

- Allows for structured storage of information
- Enables fast searching and sorting
- Prevents duplication through key fields [5 marks]

SECTION C: Visual Interpretation (10 marks)

1. Two input devices:

- Keyboard
- Mouse

[2 marks]

2. **One output device:** Monitor or printer

One storage device: External hard drive or USB

[2 marks]

3. Router function:

Connects the computer to the internet or network; routes data between devices.

[2 marks]

4. File transfer process:

Use File Explorer to locate the file, then copy/paste or drag the file into the external drive icon shown on screen.

[4 marks]

SECTION D: Ethics and Cybersecurity (15 marks)

1. **Cyberbullying:** Using digital platforms to harass or threaten others.

Effect: Causes emotional stress, anxiety, poor school performance.

[5 marks]

2. **Digital citizenship:** Refers to responsible use of technology.

Importance: Helps learners respect others online, protect privacy, and use resources wisely.

[5 marks]

- 3. Ethical use examples:
- Don't plagiarize assignments

- Don't install unauthorized software
- Use resources for educational purposes only [5 marks]

✓ TOTAL: 100 MARKS

