

COMPUTER STUDIES – 451/1 (THEORY)

FORM 2 END TERM 2 EXAMINATION

TIME: 2HOURS

1. a) What is a computer laboratory? [2mks]

A room specifically designed for installation of computers and provide a conducive environment for learning computer studies.

- b) State four possible causes of fire outbreak in a computer laboratory. [4mks]

Electrical faults;

Natural causes e.g. lightning

External attacks e.g. arsonists/terrorists

Inflammable materials

Accidents

- c) What actions should be taken in case of a fire outbreak in the computer laboratory? [4mks]

Switch off main electrical supply

Vacate the room

Inform master in charge

Call for help

Try to extinguish using the appropriate gaseous type fire extinguisher (not water)

2. List four differences between a micro computer and a supercomputer. [4mks]

<i>Microcomputer</i>	<i>Super computer</i>
<i>Small in size</i>	<i>Big in size</i>
<i>Low processing power</i>	<i>Very high processing power</i>
<i>Low storage area</i>	<i>Very large storage location</i>
<i>Cheap</i>	<i>Very expensive</i>
<i>Consume less power</i>	<i>Consume a lot of power</i>

3. State four benefits of using a computer in a school library. [4mks]

Record keeping made easier e.g. easy to track borrowers and books

Easy to search for library materials

Books and other materials can be held electronically hence allowing multimedia usage.

Library materials can be electronically marked thus minimizing loses and theft

4. Describe each of the following types of computers. [4mks]

Hybrid

Is one that has both analog and digital features

Embedded

One that is within some other device such as domestic appliances, petrol pumps etc. a computer attached to another machine.

5. a) List four types of keys found on a computer keyboard. Give an example of each. [4mks]

Alphanumeric

Function keys

Numeric keypad

Special keys

Cursor control keys

- b) i) Explain the term toggle keys as used in a computer keyboard. [2mks]

These are keys that alternate the input mode. When pressed ON they are intended to perform a task, when OFF, they perform different task.

- ii) List four examples of toggle keys on a computer keyboard. [2mks]

Caps Lock, Insert, Pause, Num Lock, Scroll Lock

6. State three functions of Un-interrupted power supply. [3mks]

Protect devices against high and too low voltage

Provides temporary power supply in case of sudden power outage

Stabilizing the frequency/protection

Surge protection

Suppresses
Allow for protection, backup, alert

7. A computer laboratory experiences power supply problems. Describe three power related problems that should be addressed. [6mks]

Blackout – this is unexpected disconnection of power supply of power supply in the laboratory.

Power sag: sudden drop of voltage levels that lasts less than a second.

Transients/surge: high voltage flowing

Brownout: partial blackout where there's low voltage flow

Short circuit: livewires touching each others

Loose connection, which may cause tripping or total power failure.

8. Explain two types of storage devices used in a computer giving an example of each. [4mks]

Primary storage devices –e.g. RAM, ROM

Secondary storage devices – e.g. hard disk, magnetic tape, CD-ROM, DVD, Flash disk

9. i) List four differences between a laser printer and a dot matrix printer. [4mks]

<i>Laser printer</i>	<i>Dot matrix printer</i>
<i>Expensive</i>	<i>Cheap</i>
<i>Non-impact printer</i>	<i>Impact printer</i>
<i>Very fast</i>	<i>Very low</i>
<i>High quality print out</i>	<i>Low quality print out</i>
<i>Multiple copies impossible</i>	<i>Multiple copies possible</i>

10. ii) Students enjoy noisy computer games.

- a) Which two hardware devices are needed to produce sound and one input device for playing games? [3mks]

Sound card

Speaker

Joystick

- b) Apart from mouse, name four input devices connected to a computer. 54 [4mks]

Keyboard

Trackball

Touch pad

Keypad

Touch screen

Digital camera

OMR, OCR, OBR

- c) List four factors to be considered when acquiring a printer. [4mks]

Initial cost

Print quality

Running cost

Speed of the printer

Whether colored or black and white

Paper size

Nature of work

Volume of work

Technology involved e.g. printing from storage media

11. Write each of the following acronyms in full as used in computing. [4mks]

- a) CAD

Computer Aided Design

- b) DVD

Digital Video Disk/Versatile disk

- c) WORM

Write Once Read Many

d) POS

Point of Sale/Point of sale terminal

12. State one function for each of the following elements of a computer system. [6mks]

a) Hardware

To perform tasks of inputting, storage, outputting, processing during data processing and communication.

b) Software

Instruct the hardware/computer on what to do during data processing

Provides interface between hardware and liveware

Accept functions of software based category i.e. system/application/working/uses

c) Liveware

Meant to design or operate a computer

13. List the four categories of system software. [4mks]

Firmware

Networking software

Operating system

Utilities

14. State five file details that are assigned a file by the operating system which can assist in tracing the file. [5mks]

File types

File extension

File size

Creating time/date of storage/saves time

Owner/Account used

Time of modification

Usage conditions/file attributes (Read only/Archives/Hidden)

Protection information

Contents of the file- access time

15. Explain three features of a graphical user interface as used in computers. [6mks]

Windows – a rectangular area on the screen where various applications run.

Icons – a picture or symbol which used to represent a software application or hardware device.

Menus – a list of options from which the user can choose from

Pointer- a symbol such an arrow which moves around the screen as the user moves the mouse.

16. State four advantages of word processors over manual typewriter. [4mks]

Editing and formatting is easy

Has punctuation and style checking capability

Allows one to custom document printing needed

Has built in dictionary for spell checking

Offer alternative words (thesaurus)

17. List three editing features of word processing. [3mks]

Moving and copying

Cursor movement

Find and replace

Inserting and overtyping

Deleting text

18. A student typed a letter in a word processor and the last line of the letter flowed to the second page. State four ways in which the student could have adjusted the letter to fit on one page without changing the paper size. [4mks]

Changing the paper orientation

Changing the font

Changing the font size

Reduce margin size

Reduce character spacing

Reduce line height

Change font style e.g. bold/italic

19. State the function of the following key combination.

[6mks]

CTRL+ O

Open an existing document

CTRL + E

Center the selected text

CTRL + C

Used to copy a selected text

CTRL + N

Open a new document

CTRL + A

Highlight the entire document

CTRL + B

used to bold selected text