

UNEB UACE SAMPLE PAPER 2013
MARKING GUIDE

1. (a). **Modern computers transform data into information. The stages are:**

- *Data collection.*
- *Preparation of data*
- *Input of Data*
- *Processing of data*
- *Storage of data*
- *Output of results*

(b) **Identify one device that can facilitate any one of the stages listed above.**
(01 mark)

- **Input stage-***Keyboard, Mouse, trackball, joystick, Microphone, Scanner*
- **Processing stage-***Motherboard, Central Processing Unit, RAM Chips, ROM Chips.*
- **Output of data-***Monitor, Printer, Projector.*
- **Storage of data-***Memory Cards, Flash disks, HDDs, CD&DVDs*

2. **State any five characteristics of a computer.** **(05 marks)**

- **High Speed:** *computer can perform millions (1,000,000) of instructions and even more per second.*
- **High level of Accuracy:** *The degree of accuracy of computer is very high and every calculation is performed with the same accuracy.*
- **Diligence:** *A computer is free from tiredness, lack of concentration, fatigue, etc. They are very meticulous and are capable of doing and repeating similar task without tiring or getting bored.*
- **Versatility:** *It has capability to perform completely different type of work at the same time- multitasking, multi-programmable etc.*
- **Memory:** *The Computer has an in-built memory and we can store a large amount of data during processing.*
- **Large storage Capacity:** *Unlike other data processors, computers are capable holding large amounts of data for long time without losing it through their storage media like; HDD, CDs, flash disks, DVDs, etc.*
- **Artificial intelligence (AI):** *AI = Ability of computer to mimic human thought. Computers are very intelligent devices and can receive and respond to requests, and give the appropriate response.*
- **Automation and programmability:** *Computers receive and work on instruction on their own. They work on minimal human intervention.*

3. (a) What is computer literacy.

(02 marks)

The ability to use and apply computer skills so as to solve day to day problems.

(b) Servicing computers is an activity which should be done regularly. Give three reasons why computers should be regularly serviced. (03 marks)

- *Improve efficiency of the computer and its peripheral devices, b. To prevent and or remove spyware and virus,*
- *To enable system upgrading to better versions,*
- *Allow system hardware and software installations e. Carry out hardware and software troubleshooting*
- *Replace tear and wear: both hardware [e.g hardware crash] and software configurations.*
- *Carry out diagnostics on computer operations h. Enable data recovery*

4. (a) What is a folder in computer file management?

(02 marks)

A file folder is an object [a collection of] multiple documents, files and other folders.

Refer to files of the same directory: a file is used interchangeably with directory.

(b) Identify the file extensions for the following files.

(03 marks)

A word processor document e.g Ms word File extensions is .doc.

A spreadsheet file e.g Ms Excel is .xls

A presentation file e.g powerpoint is .ppt

5. The following are functions of the Operating System. Indicate True or

False.

(05 marks)

Item	Function of operating systems	True or false
a)	To process a word document	<i>False</i>
b)	To manage storage of documents	<i>False</i>
c)	To monitor system performance	<i>True</i>
d)	To administer security	<i>True</i>
e)	To enter data	<i>False</i>

6. (a) With help of an example define a soft copy.

(02 marks)

Soft copy is any file that exists and can be transmitted in digital and electronic form.

A document on computer that is not yet but may be printed.

b). Judith can transfer the file to the computer lab by use of any of the following devices:

- *Flash disk drive*
- *Memory card drive*
- *CD-ROM drive*
- *DVD-ROM drive*
- *Blue Ray drive*
- *HDD-DVD drive*
- *Floppy diskettes*
- *Zip drive*
- *Magnetic tape drive*

Item	Hardware	Function
a)	<i>Cache Memory</i>	A high speed memory built into the CPU that temporarily store data during processing
b)	<i>Control unit [CU]</i>	Part of the CPU unit that co-ordinates its operations
c)	<i>A register [R]</i>	A fast memory chip located on or near the CPU unit to help speed up processing
d)	<i>A serial port</i>	Used to connect up to 127 peripheral devices to a computer to a computer without additional expansion.
e)	<i>An Arithmetic Logic Unit [ALU]</i>	Part of the CPU that performs logical operations

8. List five elements that can be displayed on the desktop screen of a normal working computer. (05 marks)

- *Icons for folders,*
- *system programs,*
- *Recycle bin,*

- *shortcuts,*
- *Documents / files etc.*
- *Menus such as the start menu*
- *Files for various programs.*
- *My network places*

9. (a) Distinguish between a Local Area Network and Wide Area Network.

Local Area Network (LAN). *It is an inter-connection of computers which are in a relatively close proximity. The size of LAN is typically inside a building or at maximum inside a campus.*

On the other hand, Wide Area Networks (WAN), is a network connecting LANs across geographical distances. E.g. states and continents referred widely as internet. This is the biggest of all networks.

(b) Give three advantages of computer networks. (03 marks)

- *They facilitate sharing of peripherals devices. Facilitate Sharing of programs and data files (resources).*
- *Better and enhanced communication and collaboration (networking).*
- *Better access to data bases and files for sharing through Uploading and*
- *Downloading receipt of files from host computer*

10. What suitable application programs would you use to perform the following tasks?

Item	Explanation	Application software name
a)	<i>To prepare an invitation letter</i>	<i>Word processor e.g Ms Word,</i>
b)	<i>To prepare a budget</i>	<i>Spreadsheets software e.g Ms. Excel, open office Calc.</i>
c)	<i>To produce business cards</i>	<i>Desktop publishing software e.g Adobe InDesign, Ms publisher</i>
d)	<i>To prepare an employee data bank</i>	<i>Databases e.g Ms. Access, MySql,</i>
e)	<i>To prepare a presentation</i>	<i>Presentation software e.g PowerPoint.</i>

11. (a) What is social networking website? (02 marks)

Any website that enables users to create public profiles, share resources within the website and form relationships with other others. e.g Facebook, Skype, Telegram, Whatsapp, Twitter.

(b) List two examples of social networking websites. (02 marks)

- *Facebook*
- *Twitter*
- *Instagram*
- *Whatsapp*
- *Linkedn*

(c) Sate one disadvantage of social networking websites. (01 mark)

- *They release pornographic materials*
- *They are not secure- private information can easily leak to public by people following you.*
- *They lead to social isolation.*
- *The lead to defamation.*

12. Outline any five services that are offered by the internet service providers. (05 marks)

- *Chat rooms*
- *Instant messaging*
- *Email*
- *File sharing*
- *Video conferencing*
- *Message boards*
- *Internet telephony*

13. (a) State two advantages of using E-mails software over ordinary postal letters. (02 marks)

- *It is cheap- Reduces paper costs and irritation.*
- *It is convenient- E-mails can be conveniently sent to multiple recipients.*
- *It is very fast- instant.*
- *Very reliable because it is efficient and effective method of sending documents.*
- *Less risky- it is relatively safer than postal services- Secured by passwords.*
- *Increased Storage Capacity*
- *Can easily go across many time zones (continents).*
- *They offer provision for attachments.*
- *By providing a list of senders and subjects one can prioritize on which*
- *There is a possibility of multimedia mails where they can be received*
- *Provides immediate delivery feedback.*

(b) What are the uses of the following features of E-mail software?

(i) To: (01 mark)

This show the email address of the recipient of the mail. It's where you typeset the E-mail address of the receiver

(ii) BCC. (02 marks)

Enables copies of the E-mail to be sent to a third party without acknowledging any other recipients

14. Indicate True or False for the following statements. (05 marks)

Item	Statement	True or False
a)	Visual Display units can be either in-put or storage device	<i>False</i>
b)	Out-put devices provide feedback to the users	<i>True</i>
c)	Dot-matrix printers produce better images that inkjet printers.	<i>False</i>
d)	Secondary storage media is volatile	<i>False</i>
e)	The more pixels per square inch on a computer monitor the higher the resolution	<i>True</i>

15. (a) Define the term Bluetooth? (02 marks)

Bluetooth is a wireless technology standard for exchanging data over short distances using short radio waves.

(b) Name any three networking protocols. (03 marks)

- *Hyper Text Transfer Protocol(HTTP)*
- *Simple Mail Transfer Protocol(SMTP)*
- *Transmission Transfer Protocol/Internet Protocol(TCP/IP)*
- *File Transfer Protocol(FTP)*
- *Telnet*

16. Identify one purpose of each of the following utilities.

(a) File Viewer. (01 mark)

Facility that helps to display various files to provide better viewing options for proper doc. scrutiny.

(b)Disk Defragmenter. (01 mark)

Reorganizes & re-arrange the fragmented files and unused space on a hard disk so that data is accessed more quickly.

(c) Diagnosis utility. (01 mark)

Compiles technical computer information & helps outline any identified problems; checks for errors or bugs.

(d)Anti-virus. (01 mark)

Prevents, detects and removes viruses

(e) File Compression. (01 mark)

Facility that helps to reduce the size [number of bytes] of selected files to provide more storage capacity to the disk eg Zip, Winzip etc.

17. (a) State any three computer security risk in the computer laboratory. (03 marks)

- *Virus attack/ infections that corrupt files*
- *Hard disk crash due to overheating, virus attack etc.*
- *Theft by robbers*
- *Power disconnection or interruptions- switch offs.*
- *Computer hackers in case the school runs a website.*

(b) Outline any two ways to enforce computer laboratory security.

(02 marks)

- *Use of burglar proof doors, windows and locking systems*
- *Avoid dust in the lab by regular cleaning- mopping, sweeping, dusting of shoes, woolen carpets etc.*
- *Avoid carrying food items- water etc in the computer laboratory*
- *Avoid use of storage devices like flash disks that are infected with virus*
- *Disable ports to avoid carrying thru flash disks into ur computer*
- *Installing updated anti-virus and Use of updated antivirus to avoid oss of data and computer crash.*
- *Proper ventilation and installing air conditioners and fans*
- *Employ security guards to keep the computer lab safe from strangers*
- *Ensure steady supply of power e.g use of UPS [Uninterruptible Power Supply], stand by generators.*
- *Scan all storage media like flash disks using updated anti-virus*

18. Give one role of the following ICT specialists

(a) Database administrator.

(01 mark)

Responsible for installation, configuration, upgrading, monitoring and maintenance of organizations' data base systems. Manages and supervises the company's database.

(b) Programmer.

(01 mark)

Designs, develops, implements and create software/codes to operate computers and for use as support or application software

(c) Computer Technician.

(01 mark)

To carry out minor hardware / software installations and repairs

(d) System Administrator.

(01 mark)

Manages and is responsible for configuration of computer systems [servers] by upgrading, software installations and troubleshooting etc

(e) Computer instructor.

(01 mark)

To teach and guide users on how to use computers and other related devices

ID NUMBER	EMPLOYEE NAME	DOB	TELEPHONE NUMBER
U01	ARINDA RUTH	03/03/79	07724311224
U02	NAMBA PERUTH	23/11/8	0413556594

(a) Which suitable application package might have been used to capture the information? (01 mark)

- *Microsoft Access*
- *My SQL*
- *Oracle*

b) Name the data types for the following entries

(i) ID Number (01 mark)

Text/Auto number/Number

(ii) DOB (01 mark)

Date/Time.

(c) What is the appropriate primary key? (01 mark)

ID NUMBER

(d) How many records are shown in the table? (01 mark)

2 Records

20. (a) Define electronic publishing. (02 marks)

Refer to digital publication of electronic documents and or articles, books and or development of digital libraries. b). Electronic publications include:

(b) Name any three electronic publications. (03 marks)

- *E-mails*
- *E-books*
- *Online tutorials*
- *E-magazine*
- *E-bibles*