

# CERETA JOINT MOCK EXAMINATIONS 2015

## UACE COMPUTER PAPER 1 MARKING GUIDE

1. a) What is Information and communication Technology? (2marks)

*It refers to the use of modern technological devices to input, store, process, output and send data/information from one device to another.*

- b) Give **two** examples of IT applications in **each** of the following areas.(3 marks)

a) Home

Home:

- 1) Pay bills through the payment by phone (PPS) services
- 2) Buy and sell stocks online
- 3) Entertainment:

2. a) Describe briefly the differences between data and information. (2 marks)

Data is a collection of raw and unprocessed facts, figures, and symbols.

e.g., Numbers

Information is data that is organized, meaningful, and useful.

e.g., Mathematical formula

- b) What is meant by information processing cycle? (3 marks)

The series of input, process, output, and storage activities is very often called the information processing cycle.

2. Give **three** advantages and **two** disadvantages of using computer for information processing. (5 marks)

### ***Advantages:***

- 1) Tasks can be completed faster because computers work at amazing speed.
- 2) Computers can process large amounts of data and generate error-free results, provided that the data is entered correctly.
3. accurate results for accurate input data

### ***Disadvantages:***

- 1) Initial investment cost can be high.
- 2) Some staff has to be trained or retrained.

4. Suggest **five** ways to improve the speed of a personal computer system. (5 marks)

- 1) Replace the CPU with a faster one.
- 2) Add more RAM.
- 3) scan and delete computer virus
- 4) carryout disk defragmentation
- 5) install a high capacity harddisk

5. a) what are input devices? (1 mark)

It refers to hardware devices used for inserting data into a computer system

b) Give **four types** of data (4 marks)

- 1) text
- 2) audio
- 3) sound
- 4) graphic

6. Give three advantages of a LCD monitor over a CRT monitor, and then give **two** advantages of a CRT monitor over a LCD monitor. (5 marks)

Advantages of LCD monitor over CRT monitor:

- 1) Require less power
- 2) Radiation emitted by LCD monitors is neglectable.
- 3) less desk space

Advantages of CRT monitor over LCD monitor:

- 1) Can be viewed from a wide variety of angles.
- 2) Can produce fast and rich colour output.

7.. What is a peripheral? Give **three** examples of peripheral devices for a desktop computer. (5 marks)

A peripheral is an external device attached to the system unit of a computer.

Examples:

- 1) Keyboard
- 2) Printer

8. How is system software different from application software? (5 marks)

System software consists of programs that control the operations of the computer and its devices. System software also serves as the interface between the user, the application software and hardware.

Application software refers to programs that perform specific tasks for users (e.g., word processing).

9. a)How is a cold boot different from a warm boot? (2 marks)

A cold boot is the process of turning on a computer after it has been powered off completely.

A warm boot is the process of restarting, or resetting, a computer that is already turned on.

Under the Windows environment, a warm boot can be performed by pressing the CTRL+ALT+DEL key combinations.

b.Name **four** functions that are normally carried out by an operating system. (3 marks)

- 1) Starting up the computer.
- 2) Managing memory.

- 3) Managing programs.
- 4) Monitoring print jobs.

10.a Name **two** kinds of jobs that are most appropriate to use a word processor. (2 marks)

- 1) Creating form letters, memos, or reports.
- 2) Creating Web pages.

b. Name **four** special features that are normally provided with a word processor. (3 marks)

- 1) Word wrap
- 2) Mail merge
- 3) Spelling check
- 4) Find and replace

11. Suggest the kind of application software that would best fit the jobs of the following persons: (5 marks)

- a) A writer
- b) A SOHO accountant
- c) A teacher delivering his/her lesson
- d) An architect
- e) A graphic designer
- a) Word processor
- b) Spreadsheet software
- c) Presentation software
- d) Computer-aided design software
- e) Graphics software

12. Distinguish between modulation and demodulation? (5 marks)

Modulation is the process of converting digital signals into analog signals, while demodulation is the process of converting analog signals into digital signals.

13. Give **two** advantages and **three** disadvantages of networking. Suggest **one** way to transfer files without using a network. (5 marks)

Advantages:

- 1) Reduce cost by sharing hardware, software, data, and information.
- 2) Facilitates communications among people working within the network.

Disadvantages:

- 1) The hardware, software, and expertise required to set up a network can be expensive.
  - 2) Networks are vulnerable to security problems.
- Floppy disk or other removable media can be used to transfer files between computers without using a network.
- 3) source of virus spread

14. Describe briefly the difference between a local area network (LAN) and a wide area network (WAN). Give **one** example application for each of these networks. (5 marks)

A local area network (LAN) is a network that connects computers in a limited geographic area.

e.g., A network inside a school computer laboratory.

A wide area network (WAN) is a network that covers a large geographic area.

e.g., A network that connects the district offices of an enterprise across the country or across several counties in the world.

15. what is a network topology? (2 marks)

The physical topology of a network refers to the configuration of cables, computers, and other peripherals.

b. State the **three** commonly used LAN topologies (3 marks)

1) A bus network consists of a single central cable that connects all computers and devices together.

2) A ring network consists of a cable forming a closed ring, or loop, with all the computers and devices in a network.

3) All the computers and devices in a star network connect to a central computer, thus forming a star.

16. list any five services provided by the internet (5 marks)

1. e.mail services
2. video conferencing
3. internet telephony
4. world wide web
5. news group

17. Give **two** advantages of e-mail over ordinary postal mail. Give **three** advantages of postal mail over e-mail. (5 marks)

Advantages of e-mail over postal mail:

- 1) Can be picked up anywhere in the world.
- 2) Very cheap to send and very quick delivery.
- 3) very fast delivery of the message

Advantages of postal mail over e-mail:

- 1) Packets and parcels can be sent.
- 2) It does not require any special equipment.

18.How is Internet different from WWW? (5 marks)

The Internet is a worldwide collection of networks linked together. It is the largest wide area network (WAN) in the world.

The World Wide Web (WWW) is only one of the most popular services available on the Internet.

19. Describe briefly the following terms in a DBMS: (5 marks)

- a) Record
- b) Field

c) File/Table

d) Database

e) Query

a) A record contains information about a given person, product, or event.

b) A field contains a specific piece of information within a record.

c) A file/table is a collection of related records.

d) A database is an organized collection of integrated files/tables.

e) A query is a request for specific data from a database.

20 Complete each sentence below using one item from the list. (5marks)

**Hard disk, Ports, RAM, Sockets, ROM, Cables, 16, 8, 1000, Servers, Standalones, Clients, Switches**

(a) A **Hard disk** is a secondary storage device found inside the computer's system unit.

(b) **ROM** is a type of memory that does not lose its contents when power is switched off, stores programs that start a computer and does diagnosis.

(c) **8**bits of information make up a byte.

(d) The points of connection between a computer (motherboard) and its peripherals are called **Ports**

(e) **Clients** refers to a number of computers controlled by one central host computer.