

WAKISSHA JOINT MOCK EXAMINATIONS
MARKING GUIDE
Uganda Advanced Certificate of Education
UACE August 2018
SUB –I.C.T S850/1



- 1.a) Distinguish between optical character recognition Reader (OCR) and Optical mark Recognition Reader (OMR). (2 marks)
- OMR these are scanners that can sense hand drawn marks such as small circles or rectangles made on pre-printed forms in certain places. They are often used for marking multiple choice answer sheets capturing data from questionnaires while OCR readers are scanners for character and sophisticated OCR software for analyzing what is read. They are often used to turn around document forexample Electricity bill.
- b) Explain three advantages of optical mark Recognition Reader over optical character Recognition Reader (OCR) (3 marks)
- OMR has a better recognition rate than OCR because fewer mistakes are made by machine to read marks than by reading hand written characters.
- Large volume of data can be collected quickly and easily without need for a specialized trained staff.
 - The cost of imputing data and the chance of data errors can be reduced because it is not necessary to type detail for data entry.
2. a) Define the term web portal.
Web portal – site that offers specialized services such as e-mail, sports up dates, financial news and links to selected sites.
- b) Suggest two application of ICT in each of the following areas.
- Transport**
- Control of traffic lights
 - Movement of lifts
 - Recognition of car number plates (2 marks)
- Business**
- Tele-computing
 - Computer Aided Design
 - Automatic Teller machine
 - Greater of business advertisement
 - Computer Aided Manufacture
3. a) Ali wants to back up his data.
Give two reasons why making backups is necessary. (2 marks)
- Incase of hardware theft
 - Incase of fire break
 - Incase of malware
- (2 marks)

- b) Ali thinks that making backups will prevent his data from getting virus. Give one reason to support his answer. (1 mark)
Files under their back up formats can not be executed.
- c) Suggest two (2) ways of controlling viruses. (2 marks)
- Installing on active antivirus program
 - Routine / regular scanning of the system
 - Avoid coming email attachments
4. a) Differentiate between copying and moving in relation to file management. Copying creation the duplication / the original file remains in place while moving involves re allocating a file the another place / vocation. (2 marks)
- b) Give two properties of a folder. (2 marks)
- File location
 - Content
 - Data modified
 - Name
- c) Suggest the keyboard buttons one presses to close any file open without clicking on the close button. (1 marks)
- Ctrl + F4
Alt + F4
5. a) Define the term a burglar proofing (1 mark)
Burglar proofing refers to the provision of an extra protection against intruder and the computer laboratory.
- b) Give two(2 reasons for burglar-proofing. (2 marks)
- To prevent hardware theft
 - To limit access to the computer laboratory
- c) Identify 2 computer Hardware threats. (2 marks)
- Aging
 - Failure to work
 - Theft
 - Electric shocks
 - Liquids
6. a) Mention two causes of system failure. (2 marks)
- Attack by viruses
 - Poor connection o cables
- b) State the difference between software upgrade and software update. (2 marks)
Software upgrade involves the changing of the software version while software update involves the improving on the already existing software.

- c) Give one way system failure can be controlled. (1 mark)
- Regular servicing and maintenance
 - Installation of an antivirus program
 - Use of the UPS
 - Use of the stabilizer
7. a) Differentiate between traditional and electronic spreadsheets (1 mark)
Traditional spread sheets are manual based spreadsheets while electronic spreadsheets are computer based spreadsheets applications.
- b) Mention two qualities of a good graph (2 marks)
- Description title
 - should have labelled axes
- c) Mention two disadvantages of electronic spreadsheets. (2 marks)
- It is computer based
 - Needs computer literacy
 - Involves functions that are not easy to explore.
8. Differentiate between standard and In-house packages. (2 marks)
- | Vendor / standard | Custom / In-house |
|---------------------|-------------------------|
| - Readily available | - Not readily available |
| - Cheap | - Expensive |
| - General purpose | - Special purpose |
- b) Suggest the functions of the following utility programs:
- (i) **Diagnostic utility**
- Couples technical information about
 - Computer hardware and certain system
 - Software programs and prepares a report
 - Outlining any identified problem. (1 mark)
- (ii) **Screen saver**
Causes the monitor screen do display a moving object or blank screen of no keyboard or mouse activity occur for a specified period of time. (1 mark)
- c) Give one example of customized application software. (1 mark)
- Report generation systems
 - Database management systems.
9. Define a firewall. (1 mark)
Firewall refers to the combination of hardware and software that prevent intruders from accessing the network.

- b) Give two advantages of using an internet at home. (2 marks)
- Online shopping
 - Communication
 - Elearning
 - Entertainment
- (2 marks)

- c) You are given the following URL; “www.wakissha.co.ug”.

Identify;-

- (i) co.ug – Domain name
 - (ii) wakisha – user name
- (2 marks)

- 10.(a) Mention three advantages of video conferencing. (3 marks)

- Saves transport costs
- Meeting can be called at a short notice
- Avoids one from moving within unsafe weather conditions.

- (b) Explain two disadvantages of video conferencing. (2 marks)

- Decision making is hard
- Initial cost is too expensive / high
- No face to face interaction

- 11(a) Differentiate between transition loop and slide sorter facility. (2 marks)
- Transitional loop enables the presentation to run automatically and continuously without stopping while sorter view displays all slides in a thumbnail to ease arrangement

- b) Explain three qualities of a good presentation. (3 marks)

- Use appropriate fomats
- Use uniform background
- Application of minimal transitions and animations

12. Write short notes on the each of the following in relation to data communication

(i) Attenuation

Loss of quality / reduction in signal strength as it travels through a transmission media.

(ii) Multiplexing

Process of sending multiple data signals over the same medium.

(iii) Band with

Maximum amount of data a transmission medium can carry at one time.

(iv) Half duplex

Communication in both directions but only one direction at a time.

(v) **Repeater**

A device that cleans and re amplifies the data signal as it moves through the transmission media. (1 mark)

13.(a) Write down a formula that could be in cell F7 to calculate the income for the hotel named Beach Resort. (1 mark)

- $B3 * E7$
- $B3 * E7$
- $B3 * 100$

b) Describe how the formula in B13 can be copied into the cells C13, D13, and E13 (2 marks)

Highlight / click on / Right click
copy and paste into C13 to D13 and E13 or a description of replication / fill right / drag and drop.

c) State the cell addresses that are needed to create a bar chart showing the total bookings for each of the hotels. (2 marks)
A5 and E5
(A7: A11) / A5: A11

14. Suggest five services that can be provided by an ATM machine. (5 marks)

- Cash withdraw
- Deposits
- Mini statement
- Balance inquiry
- Cash storage

15. Private data or information is a collection and use of personal information. This information should not be accessed or disclosed to any other person unless permitted by the owner.

a) Explain three concerns related to collection and use of private and confidential data. (3 marks)

- i) Spreading information without the owner's consent or awareness.
- ii) Spreading inaccurate information
- iii) Eavesdropping and tapping of information for communication line.
- iv) Secretly recording and reporting user activities by using recording devices, spyware and cookies.

b) Describe the role of disaster recovery plan as a data protection measure (2 marks)
To avoid losing data and information disaster recovery plan entails backing up data creating of emergency facilities and installing fire extinguishers.

16.a) State the two factors to consider before buying a software program (2 marks)

System requirements
User friendliness of the software
Cost of the software
Availability of the software
Purpose of the software
Degree of compatibility with the available hardware components

- b) Mention three ways computer users can obtain software (3 marks)
- Through buying from authorized software vendors
 - Through creating own software
 - Through downloading open source software
 - Through buying software incensed from the software developers.
17. Write the following computer acronyms in full.
- (i) MODEM – Modulation – Demodulation
 - ii) GPRS - General Packet Radio Service
 - iii) UGA - Video / Visual Graphic Array
 - iv) PCI - Peripheral Componen Interconnect
 - v) CMOS - Complementary Metal Oxide Semi conduction (5 marks)
- 18.a) Why is the binary number system used for computer? (2 marks)
- It is easily understood by the computer.
- b) Convert 10101010 to its decimal equivalent. (3 marks)
- $$\begin{aligned}
 & (1 \times 2^7) + (0 \times 2^6) + (1 \times 2^5) + (0 \times 2^4) + (1 \times 2^3) + (0 \times 2^2) + (1 \times 2^1) + (0 \times 2^0) \\
 & = 256 + 0 + 64 + 0 + 16 + 0 + 2 + 0 \\
 & = 338_{\text{two}}
 \end{aligned}$$
- 19.a) Define the term digital forensics. (1 mark)
- Digital forensics reffers to the process of interpreting electronics data
- b) Mention two causes of signal attenuation (2 marks)
- Noise
 - Physical surroundings
 - Travel distance
- c) Hard grametrical system
- voice recognition
 - thumbprint system
 - Iris recognition
 - face recognition system
20. Why do you think there are still few people using computer in Uganda today. (5 marks)
- Lack of electricity supply in some parts of the country.
 - High levels of lack of computer skills
 - There are expensive to buy.
 - Maintenance costs are high

END