

### SECTION A

- |        |         |         |         |
|--------|---------|---------|---------|
| 1. - B | 6. - B  | 11. - D | 16. - A |
| 2. - B | 7. - D  | 12. - A | 17. - A |
| 3. - B | 8. - D  | 13. - B | 18. - D |
| 4. - C | 9. - D  | 14. - C | 19. - D |
| 5. - D | 10. - A | 15. - A | 20. - C |

### SECTION B

- 21.(a) - Computer software refers to a set of instructions that tell a computer what to do and how to do it. **OR**  
 - Computer software refers to a collection of computer programs and other related data that provide instructions to computer hardware. **OR**  
 - Refers to electronic instructions and procedures that control the operation of a computer. **OR**  
 - Its a set of instructions that tell a computer to perform or accomplish a given task. (Any 1x2)

(b) Categories of computer software

- System software
- Application software (Any 2x1)

(c) **System software**

- Operating system e.g. Windows, Linux, Unix, DOS, Mac-OS e.t.c.
- Utility programs e.g. Anti-virus, Merge, Sort, Compression, Defragmentar, Diagonsis, Search e.t.c.
- Programming Languages e.g. (All programming languages)

**Application software**

- Word processors e.g. Ms word, Abi word, Wordpro, Word perfect etc.
- Spreadsheet application e.g. Ms-excel, Lotus 1, 2, 3, Open office.org calc, Kspread etc.
- Presentation software e.g. Ms powerpoint, Screencast, Adobe persuasion etc.
- Web Authoring Software e.g. Internet explorer, Opera, Firefox mozilla etc.
- Accounting software e.g. microsoft accounting, quickbooks,
- Audio and video editing software (Any 2x1)

**NB:**Answers **MUST** be based on any one category given in 21(b) above.

- (d) (i) - A word processor is a computer application program used to produce a text document. **OR**  
 - It is an application program that enables a user to create, save, edit, format, and print a professional document. (Any 1x2)

(ii) Examples of word processing software.

- |                  |                       |              |
|------------------|-----------------------|--------------|
| • Lotus word pro | • Corel word perfect  | • Org writer |
| • Abi word       | • Kingsoft writer     | • Word star  |
| • Apple pages    | • Latex editor        | • Word pad   |
| • Ms word        | • Libre office writer |              |
| • Open office    | • Google docx         |              |

(Any 2x1)

- 22.(i) (a) Total for PUSI = 230 (1x1)  
 (b) Average for SANDRA = 49 (1x1)  
 (c) Position for KAIJA = 1 (1x1)  
 (d) Total average mark for all the students = 378.75 (1x1)

(ii) Examples of spreadsheet application programs apart from Ms Excel.

- |                         |                         |
|-------------------------|-------------------------|
| • Google sheet          | • Apple numbers         |
| • Libre office          | • Kingsoft spreadsheets |
| • Lotus 1,2 ,3          | • Quattro pro           |
| • Visi Calc             | • Ability spreadsheet   |
| • Open Office. org Calc | • Super Calc            |
| • Kspread               | • Star office Calc      |

(Any 2x1)

(b) Areas where spreadsheet can be applied.

- Accounting
- Data managent
- Statistical analysis
- Forecasting

(Any 2x1)

- 22.(b) (ii) Merits of using Electronic spreadsheets.
- It is easy to make corrections and changes to data worksheet
  - Operation is fast with the help of inbuilt functions.
  - They offer larger virtual datasheets for data entry and manipulation
  - They provide/have inbuilt formulas and functions that enable the user quickly manipulate mathematical errors.
  - It allows re-calculation if entries are adjusted or changed
  - Provide functions and formulas to perform calculations.
  - Electronic spreadsheet produce neat work.
  - Data can be stored and retrieved for repeated use under electronic spreadsheet. (Any 4x1)

- 23.(a) (i) - A browser is a program used to locate and display web pages  
 - Is a communication software designed to allow the uses to access and view web pages (HTML documents) on the internet.  
 - Is a software application that allows the users to view information on the www.  
 - Is a type of software that retrives and presents information resources on the internet.  
 - Is a communication software that is designed to interpret hypertext Markup Languages. (Any 1x2)

(ii) Examples of browsers:

- |                        |                    |
|------------------------|--------------------|
| • Ms Internet Explorer | • Google chrome    |
| • The world            | • Safari           |
| • Opera                | • Maxthon chrome   |
| • Mozilla firefox      | • Tecent Traveller |
| • Netscape Navigator   | • UC browser       |

(b) Merits /Advantages of using Emails

- |  |  |
|--|--|
| • Provide immediate feedback                           | • possibility of multimedia mails to be recieved |
| • very quick delivery                                  | • Sending is cheaper                             |
| • They can be sent to multiple recipients conviniently | • Provide secured passwords                      |
| • Reduces paper costs                                  | • They offer provision of passwords. (Any 3x1)   |

(c) Limitation of using Emails:

- |  |   |
|--|---|
| • Expensibe in terms of Hardware and Data      | • They spread computer virus                    |
| • Computersa literacy is required              | • Limited Access to the internet                |
| • Easily be accessed or intercepted by Hackers | • They are associated with Junk mails (Any 3x1) |
| • Need of face to face interaction             |   |

- 24.(a) (i) Cold booting is the process of starting a computer that has been completely off./This is the turning on of a computer WHILE Warm booting is the process of restarting/resetting of a computer that was already on.

(ii) Kinds of information stored in the CMOS of a personal computer.

- |   |  |
|---|--|
| • Amount of physical memory installed (RAM) | • Information of the type of disk drives |
| • current system Date                       | • Hardware settings                      |
| • Current system Time                       | • Amount of Hard disk space. (Any 2x1)   |

(b) Examples of secondary storage Devices

- |                     |                    |                       |
|---------------------|--------------------|-----------------------|
| • Hard disk drive   | • Flash disk drive | • Jazz drive          |
| • Floppy disk drive | • DVD drive        | • Magnetic tape drive |
| • CD drive          | • Zip drive        | (Any 2x1)             |

(c) Examples of Secondary storage media

25.(a) Output devices

- |             |               |
|-------------|---------------|
| • Printer   | • Earphone    |
| • Projector | • plotters    |
| • Monitor   | • Fax machine |
| • Speaker   | (Any 4x1)     |

- (b) 1. Keyboard                      4. Barcode reader  
 2. Mouse                          5. Voice/Sound reader  
 3. Scanner                        6. Game pads, Joystick, lightpen, mouse, keyboard (Any 1x1)

- 26.(a) \* Computer Networks is a connection of two or more computers sharing the same resource i.e. peripherals, software and communication purpose. OR  
 \* A collection of two or more computer and devices connected by channels so that they communicate with and other and share resources. (Any 1x2)
- (b) Network types:
- Personal Area Network (PAN)
  - Wide Area Network (WAN)
  - Metropolitan area Network (MAN)
  - Local Area Network (LAN)
  - Storage Area Network (SAN)
- (c) - Unguided Media/wireless e.g. Bluetooth, Infrared, Satellite  
 - Guided media/ wired e.g. coaxial, untwisted, twisted pair cable, optical/fibre cables etc. (Any 1x2)
- (d) I.R.C - Internet Relay Chart  
 F.T.P - File Transfer Protocol  
 NIC - Network Interface Card

### SECTION C

- 27.(a) Features of spreadsheet application.
- Saving feature which enables a user to create a file for the workbook in a directory on the disk.
  - Column and rows where columns are labeled with letters and rows labeled with numbers.
  - Auto complete feature which speeds up data entry especially if one has to entre a particular word or phrase repeatedly.
  - Formulas which are used to express mathematical relationships between cells.
  - Copy which allows one to duplicate a section of text.
  - Functions which are used as shortcuts when performing mathematical calculations e.g. sum, Average, Min etc.
  - Cell references (Addresses which are row and column coordinates of a cell)
  - Ranges which combine two or more adjacent cells in a worksheet e.g B2:D8.
  - Graphics and charts which represnt data graphically in a spreadsheet.
  - Insert/delete column and row feature
  - Cut and paste which allows one to remove a section of text from one place and insert it somewhere else in a spredssheet
  - Search and replace feature that allows one to search and replace aparticular word/phrase.
  - Headers/footers and page numbering
  - Spell checkers
  - Print
  - Sort
  - alignment Wraptext e.t.c. (Any well explained 5x2)
- (b) Advantages of using Ms Excel.
- It is easy to make changes and corrections (to edit) data in microsoft excel.
  - Ms Excel can quickly perform mathematical, statistical and financial calculations.
  - Ms excel have inbuilt functions and macros which make work easy
  - Calculations are always accurate provided that the data and formula entered are correct
  - Ms excel easily dilters, sort and arrange data in alphabetical order for better organisation
  - In Ms excel work can be saved in sofcopies that can be easily modified and reused in future
  - Ms excel allows recalculation of entries adjusted/changed
  - Ms excel operations are fast with the help of inbuilt functions and macros (Any Explained 5x2)
28. End user application programs
- Accounting packages
  - Word processors
  - Spreadsheet
  - Database management system
  - Presentation software
  - computer aided design software
  - Desktop publishing software
  - Web authoring software
  - Media players
  - Graphics software
  - Image/paint editing software
  - hospital management system
  - School management systems
  - Insurance system
- (Any explained 10x2)

29.(a) Services of the internet

- Email
- Elearning
- Eregistration
- Ecommerce
- Voice over Internet Protocol
- Instant messaging
- Online charting
- Internet Relay chart
- Video conferencing
- Teleconferencing
- Cloud computing
- Usenet
- web directory
- social networking
- World Wide Web
- File transfer protocol
- Telenet
- News groups etc.

(Any 4x1 well explained)

(b) **Arguments in favour**

- employment opportunities e.g computer teachers, software engineers have been created in Uganda.
- Improvement in Uganda's teaching e.g through using projectors and white boards.
- Facilitated communication through the introduction of mobile telecommunication services
- Improvement in security e.g use of CCTV cameras
- Facilitated entertainment by providding computer games
- Promoted online buying and selling of products
- Promoted online registration
- It has improved the banking sector e.g online banking facilities e.t.c.

(Any 6x1)

**Arguments aganist;**

- Unemployment e.g. a tractor can do work of a 1000 people
- Creation of health Hazzards e.g. eyestrain, backache
- computers have killed creativity
- Moral deacay/degradation through watching pornographic literature
- Environmental depletion e.g. poluuiton
- destruction of the culture
- Electronic fraud
- Hacking
- Impersonation
- Rapid computer virus spread.

(Any 6x1 well explained)

**END**