



1. (a) It is a series of activities a computer goes through to transform data into information.
1 mark
- (b)
- Input stage
 - Processing stage
 - Storage stage
 - Output stage
2. (a) ICT can be used to improve teaching and learning in the following ways.
4 marks
- Student research
 - Study online
 - Lesson presentation
 - Sharing learning resources
 - Production of academic documents like report cards, transcripts and certificates.
- Any 2 x 1 = 2 marks
- (b) Advantages of using ICT in business.
- Storage of large volumes of data for future use.
 - Generation of error free results.
 - Process large amounts of data.
 - Large number of tasks can be processed at a high speed.
 - Data can easily be secured through use of passwords and other security mechanisms.
 - Eases communication.
 - Eases online banking.
- Any 2 x 1 = 2 marks
- (c) Challenges of using ICT at home.
- Exposure to pornographic pictures.
 - No concentration on academic work.
 - Technological illiteracy.
 - Digital distraction
 - Time wastage
 - Health related issues
 - Expensive to maintain.
 - Irregular power supply
 - High internet costs
 - Insufficient power supply
 - Time wastage
 - Health related issues
 - Expensive to maintain.
- Any 2 x 1 = 2 marks
3. (a) A computer Laboratory is a special room set up for teaching and learning of computer practical skills.

- (b) (i) Use of a blower.
It is used to remove dust from the computer system and other hardware components 1 mark
- (ii) Use of a fire extinguisher
It is used to put off fire in case of any fire outbreak. 1 mark
- (c) Measures employed to ensure safety of computer users.
- Use of anti glare screen to reduce eye strain.
 - Installation of fire extinguishers.
 - Use of ergonomic chairs to provide the comfort and avoid back pain.
 - Installation of lightening conductors.
 - Insulate power cables and lay them away from pathways. 2 marks

4. (a) Files can be managed through
- (i) Use of clear naming conventions
 - (ii) Use of folders for easy location of files quickly.
 - (iii) Use of network devices
 - (iv) Cloud storage platforms store and manage in a single location / Backup any 3 x 1 = 3 marks

- (b) Benefits of computer file management.
- Easier to locate and access specific documents.
 - Easy file retrieval.
 - Data protection by enabling users to create backups.
 - File management supports collaboration by providing shared access to files and folders.
 - Space optimization
 - Accessibility: easy to access from any device with internet access.
 - Security of files.

Any 2 x 1 = 2 marks

5. Steps taken when saving a presentation file when the presentation file is open.

- (a) Click on the office button or file tab.
- (b) Select "Save as"
- (c) From the dialogue box, enter/ type the file name as "WAKISSHA"
- (d) Then select the location as desktop, then select the folder or click on new folder to create it.
- (e) Then select open and finally click on "save"

@ step 1 mark
= 5 marks

6. (a) (i) Storage Medium is a physical material on which a computer keeps data.
(ii) Reading is the process in which a storage device transfers data from a storage medium into memory.

Reading is the process of accessing and retrieving data from a storage medium.

- (b)
- | | |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| RAM
Volatile
Read and write
Temporary
Can be increased | ROM
Non – volatile
Read only
Permanent
Cannot be increased |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------|
- Note:** use of a conjunction to differentiate is a must.

Any 2 x 1 = 2 marks
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- (c) Examples of magnetic storage media
- Hard disk
 - Magnetic tapes
 - Floppy disks
 - Zip disks

Any 1 x 1 mark = 1 mark

7.

- (i) False
- (ii) False
- (iii) True
- (iv) False
- (v) False

8. (a) Components / Path of the mother board

- Ports
- Memory slots
- Processor slot
- Expansion slots
- Capacitors
- Transformer
- Data lines
- CMOS Battery slot
- Bios
- Bridges

Any 2 x 1 = 2 marks

Role of a mother board

- (b)
- Hardware integration
 - Data communication
 - Power distribution
 - Initialises hardware components during the boot-up process (BIOS – Basic Input/Output System)
 - Provides expansion slots.

Any 3 x 1 = 3 marks

9. (a) System software is a set of programs that control and coordinate all resources of a computer.

(b) Branches of system software

- Operating system
- Utility software
- Programming languages

Any 2 x 1 = 2 marks

(c) Standardised software refers to software designed to perform a variety of tasks to the user.

While

In housed software is the software designed on user request to perform a specific function.

10. (a) Signs of a failed operating system.

2 marks

- Computer failing to boot completely
- Computer restarting often

- Displaying of error messages
- Slow in performance
- Corrupted files.
- Inability to update.
- Failure to recognize hardware devices
- Poor network connectivity.

Any 3 x 1 mark = 3 marks

(b) Factors to consider while choosing a good software.

- User friendliness
- Error free
- Easier to install
- System specifications
- Available documentation
- Purpose of the software
- Compatibility with other software.

Any 2 x 1 = 2 marks

11. Task

- Produce text documents
- Presentation software e.g. Power point
- Accessing the internet
- Photo editing
- Spreadsheets e.g. Ms. Excel

1 x 1 each = (05 marks)

12.

- Internet access
- Web hosting
- Data backup
- Software provision
- Domain name registration
- Providing customer E-mail address.
- Technical support
- Network monitoring

Any 5 x 1 = 05 marks

13.

- Open your email account
- Click on the compose button to typset the message.
- Click on the attachment button.
- In the attach dialogue box, select the file to attach.
- Click the attach or done button to attach file.

Any 5 x 1 = 05 marks

14. (a) Video conferencing is service of the internet that enables the transfer of information in form of text, audio, video between people in different locations.

1 x 1 = 01 mark

(b)

- Microphone for Audio input
- Video camera for images
- Speakers for audio output
- Internet connectors.
- Computer set/smart phone
- Software e.g. Skype

- Projector

4 x 1 = 04 marks

15. (a) Link between device or more devices to enable sharing of resources and allow communications.

1 x 1 = 01 mark

(b)

- Peer to peer
- Server
- Client server

(c)

- Helps in research
- Sharing of heavy materials
- Easy communications
- Storage of information
- Easy sharing of limited resources
- Enables online learning

2 x 1 = 02 marks

2 x 1 = 02 marks

16. (a) Guided Transmission Media involves the transmission of signals through a physical medium or restricted paths i.e. Cables

02 marks

While

Unguided involves transmitting of signals through space without cables.

- (b) Twisted pair cables

1 x 1 = 01 mark

- (c) Modulation involves converting data signals from analog to digital form.

While

Demodulation involves converting the digital signals to analog.

With a conjunction score (02 marks)

Without conjunction don't score

17. (a)

- (i) Digital divide is the gap that exists between those who have access to ICT and those without access to ICT.

1 mark

- (ii) Digital migration involves moving from use of analog systems to digital systems.

1 mark

(b)

- Copyright
- Patent rights
- Trade mark
- Trade secrets

Any 2 x 1 mark = 02 marks

- (c) Computer ethics are the moral guidelines that govern individuals on the use of computers and information systems.

1 mark

18. (a) (i)
- Violation of intellectual property rights
 - Undermines I.T code of conduct.
 - Eludes one's integrity
 - Lack of technical support
- 1 mark
- (ii)
- Loss of income for the software industry and the developer.
 - Loss of sales revenue to the software industry.
- 1 mark
- (iii)
- Copyright infringement
 - Criminal liability
 - Reputational damage
- 1 mark
- (b)
- Ensure use of licensed software
 - Complying with the copyright laws and licensing agreement
 - Putting in place legal frameworks.
 - Anti-piracy education and awareness
 - Digital rights management.
 - Online piracy monitoring
 - Access to affordable alternatives.
 - Setting installation passwords or codes to prevent installation of illegal software.
- Any 2 x 1 = 2 marks
19. (a) 4 records 1 mark
- (b) Book number 1 mark
- (c) (i) Text 1 mark
- (ii) Currency 1 mark
- (d)
- Microsoft access database
 - Oracle
 - Db V
 - Mysql
- Any 1 x 1 = 1 mark
20. (a) Electronic publishing is digital publications of electronic documents / articles books or development of digital libraries.
- Any 2 x 1 = 2 marks
- (b)
- E books
 - E magazines
 - E Bibles
 - Cyber software technologies.
- Any 3 x 1 mark = 3 marks

END