

OKO-UCHE LOVEL NKECHINYEREM

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## QUESTION 1

### 1a. Definition of a Computer and Its Four Major Functions

A computer is an electronic device that accepts data as input, processes it according to a set of instructions, stores it, and produces meaningful information as output.

#### Four Major Functions of a Computer

##### Input Function

The computer receives data from input devices such as keyboard, mouse, scanner, etc.

##### Processing Function

The Central Processing Unit (CPU) processes the data using instructions (programs).

##### Output Function

The processed data is presented as information through output devices like monitor, printer, or speakers.

##### Storage Function

The computer stores data and information for future use in devices like hard drives, flash drives, etc.

### 1b. Basic Components of a Computer System

#### Hardware

Physical parts of the computer.

Examples: Keyboard, monitor, CPU, printer.

#### Software

Programs that instruct the computer on what to do.

Examples: Windows OS, Microsoft Word.

#### Data

Raw facts and figures processed by the computer.

Example: Numbers, text, images.

People (Users)

Individuals who operate and interact with the computer.

Example: Students, programmers.

Procedures

Guidelines for operating the computer system.

Example: Steps for saving a file.

QUESTION 2

2a. Difference Between Hardware and Software

Hardware

Software

Physical components of a computer

Programs and instructions

Can be seen and touched

Cannot be touched

Example: Keyboard, Monitor

Example: Windows, MS Word

2b. Types of Software

System Software

Controls and manages computer hardware and provides a platform for application software.

Examples:

Windows Operating System

Linux

macOS

Application Software

Designed to perform specific user tasks.

Examples:

Microsoft Word

Excel

Google Chrome

### QUESTION 3

#### 3a. Concept of Booting

Booting is the process of starting or restarting a computer and loading the operating system into memory so the system becomes ready for use.

#### 3b. Step-by-Step Booting Process

Power On

The computer is switched on.

POST (Power-On Self-Test)

The system checks hardware components like RAM, keyboard, etc.

BIOS/UEFI Activation

Firmware locates the bootable device (hard drive, SSD).

Bootloader Execution

Loads the operating system.

Operating System Loads

The OS is loaded into RAM.

User Interface Appears

Login screen or desktop is displayed.

### QUESTION 4

#### 4a. Definition of File Management

File management refers to the process of organizing, storing, retrieving, and maintaining files in a computer system.

#### 4b. Five Common File Operations and Their Importance

### Creating Files

Used to generate new documents.

Importance: Helps store new information.

### Saving Files

Stores data permanently.

Importance: Prevents loss of work.

### Opening Files

Accessing saved files.

Importance: Allows editing or viewing.

### Deleting Files

Removing unwanted files.

Importance: Frees up storage space.

### Renaming Files

Changing file names.

Importance: Helps in proper organization and identification.

## QUESTION 5

### 5a. Applications of Computers in Healthcare / Animal Health Services

#### Patient Record Management

Stores medical histories and treatment records.

#### Diagnostic Tools

Used in machines like X-rays, MRI scans, and lab testing.

#### Telemedicine

Enables remote consultation between doctors and patients.

#### Research and Data Analysis

Helps in disease tracking and drug development.

## Veterinary Services (Animal Health)

Used for animal diagnosis, breeding records, and monitoring livestock health.

## 5b. Four Common Computer Problems and Solutions

### Slow Performance

Cause: Too many programs running

Solution: Close unused applications, upgrade RAM

### Virus or Malware Attack

Cause: Unsafe downloads

Solution: Install antivirus and scan regularly

### System Crash/Freezing

Cause: Software errors or overheating

Solution: Restart system, check cooling system

### No Internet Connection

Cause: Network issues

Solution: Check cables, restart router, troubleshoot network