ASSIGNMENT

COURSE CODE: COM 311.
COURSE TITLE: COMPUTER APPRECIATION AND APPLICATION.
LEVEL: HND II.
DEPARTMENT: ANIMAL HEALTH AND PRODUCTION TECHNOLOGY.
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QUESTION (1a).

Define computer and explain its four major functions?

A computer is an electronic device that processes data into useful information. It accepts inputs, processes it, stores data and produces output.

Four major functions of a computer.

1. **Input Functions** (gets data from you, like typing).
2. **Processing Functions** (handles the data, like calculations).
3. **Storage Functions** (saves data, like files).
4. **Output Functions** (shows results, like display or print).

QUESTION (1b).

Describe the basic components of a computer system with examples?

1. Hardware: These are physical components of a computer including:
Input Devices- Devices used to enter data into a computer (e.g., Keyboard, mouse, scanner).

Processing Unit – Which acts as the brain of the computer . (E.g., Arithmetic Logic Unit (ALU), Control Unit (CU) .

2. Software: Software refers to the set of instructions that tell a computer what to do. It is classified into:
System Software – Includes the operating system (OS) (e.g., Windows, macOS, Linux).
Application software – Programs designed for a a specific tasks (e.g., Microsoft Word, Photoshop etc).

QUESTION (2a).

Differentiate between hardware and software?

HARDWARE.

Computer hardware refers to the physical component of a computer system that you can see and touch. These components works together to process data, to store information and produce output.

WHILE

SOFTWARE

Refers to the programs and instructions that tells a computer hardwares what to do. Unlike hardware, Software cannot be touch. It is intangible. Without the software, computer hardware cannot perform any meaningful task.

QUESTION (2b).

Explain the two main types of software, giving at least three examples each?

1. **System Software:** Controls and manages the computer hardware, and provides a platform for application software to run.

Examples: Utility Programs, Device Drivers, Operating System.

2. **Application software:** Helps users perform specific tasks.

Examples: Spreadsheet software (Excel), Word Processing, Presentation Software (PowerPoint).

QUESTION (3a).

Explain the concept of booting?

Booting is the process of starting up a computer, it

involves loading the operating system into the memory (RAM) so the computer can function.

QUESTION (3b).

Describe the step-by-step booting process of a computer system?

BOOTING PROCESS:

1. The computer runs a Power-On Self Test (POST) to check the hardware functionality **.**

2. The BIOS/UEFI (Basic Input/Output System or Unified Extensible Firmware Interface) initializes the system .

3. The bootloader loads the operating system (Windows, macOS, Linux etc).

4. The operating system prepares the user interface for interaction .

QUESTION (4a).

Define File Management?

File Management refers to the organization, storage, retrieval, and manipulation of files on a computer.

QUESTION (4b).

Explain five common file operations and their importance?

1. Creating Files: Using applications like Microsoft Word, Notepad or Excel.

2. **Opening Files:** Accessing files using relevant software.
3. **Renaming Files:** Changing file names to organize data better.
4. **Saving Files:** Storing files in specific locations using the **"Save"** or **"Save As"** option.
5. **Copying and Moving Files:** Transferring files between folders or devices.

QUESTION (5a).

Discuss the applications of computers in healthcare or animal health services?

Computers have improved medical services, diagnosis, and patient management.

a. Electronic Health Records (EHRs).

Hospitals use **EHRs** to store patient records digitally, ensuring easy retrieval.

Systems like **EPIC** and **Meditech** help manage patient history and prescriptions.

b. Medical Diagnosis and Imaging.

AI – assisted tools analyze **X – rays, MRIs and CT scans** for early disease detection.

Machine learning helps in diagnosing diseases like cancer and heart conditions.

c. Telemedicine.

Remote healthcare services allow patients to consult doctors via video calls.

Mobile health apps help track fitness and provide medical advice.

d. Robotics in Surgery.

Robots assist in complex surgeries with high precision (e.g., da Vinci Surgical System).

QUESTION (5b).

Highlight four common computer problems and their solutions.

PROBLEM	**POSSIBLE SOLUTION**
Computer Freezing	Restart the computer, check for malware, update software.
Printer not working	Check cables, update drivers, restart the printer.
Software not responding	Force close the application, reinstall software.
Slow Performance	Close unused programs, clear temporary files, upgrade RAM.