SHORTWOOD TEACHERS' COLLEGE BACHELOR OF EDUCATION EDUCATION DEPARTMENT SEMESTER 2

COURSE: Introduction to Information Communications

Technology (ICT)

UNIT 1: Introduction to Basic Computer Operations and Concepts

- Define basic concepts and processes associated with computer technology such as:
 - a. Information Technology
 - b. Information and Communication Technology
 - c. Information processing cycle
 - d. Computer Literacy/Media Literacy
 - e. Information Literacy
 - f. Data and Information
 - g. Hardware and Software
- Explain the functions of the computer
 - a. Input
 - b. Output
 - c. Processing
 - d. Storage
- Benefits of using Computers in Education
 - a. Speed
 - b. Reliability
 - c. Accuracy
 - d. Storage
 - e. Communication
 - f. Teaching and Learning
- Hardware Components
 - a. Input Devices

Definition of input devices

Keyboard, mouse, microphone, optical scanners, digital cameras, audio and video input, PDAs, smart phones, media players input

b. Output devices

Definition of output devices Monitors, printers, LCD projectors, plotters, speakers, fax machines, headphones, and earphones

c. System Unit

Mother board, CPU – CU and ALU, Memory, expansion slots and expansion cards, ports and connectors, system clock

d. Storage Devices

Definition for storage

Storage medium and storage device

Primary and secondary storage – RAM, ROM, magnetic disks, hard discs, optical discs, CDs and DVDs

e. Communication Devices

Definition for communication devices

Transmission media– cables, telephone line, modem

• Computer Software

- a. Definition of software/program
- b. Types of software: system software and application software
- c. System software operating system and utility programs
 - i. Operating System
 - ii. Types of OS environment multi-user, single-user, multi-user, network OS
 - iii. Popular OS MAC, Windows XP, VISTA, Windows 07
 - iv. Utility Programs disk clean-up, antivirus and system restore.

d. Categories of Application Software -

- i. Productivity: word-processing software, spreadsheet software, database software, and presentation graphics.
- ii. Graphic design/Multimedia: desktop publishing software, paint/image editing software, multi-media authoring, web page authoring
- iii. Communication: E-mail, web browser, chat rooms, newsgroup, instant messaging packaged software, custom software, shareware, freeware, and public domain software.