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| COMPUTER FORM 1 SCHEMES OF WORK – TERM 1 | | | | | | | | | | |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **LEARNING OBJECTIVES** | | | **TEACHING/LEARNING**  **ACTIVITIES** | **TEACHING/LEARNING**  **RESOURCES** | **REFERENCES** | **REMARKS** |
| **1** | **1** |  | DEFINITION OF A COMPUTER | By the end of the lesson, the learner should be able to   * Define computer * Distinguish between data and information * Explain unique characteristics of computer as a data processing tool | | | Learner to:   * Through questions and answer define computer * Through brainstorming distinguish between data and information * Through group discussion, discuss characteristics of a computer as data processing tools | * A calculator * A personal Computer * Charts * Sample data | * Lomghorn Secondary. S.Mburu, G. Chemwa page 1-2 * Computer studies Dr. Onunga and Renu Shah Page 1-2 |  |
|  | **2-3** |  | PHYSICAL PARTS OF A COMPUTER | By the end of the lesson, the learner should be able to   * State and explain various physical parts of a computer | | | * Through question and answer list parts of a Computer * Through brainstorming, explain various parts of a computer | * A working personal computer | * Gateway secondary Revision S.Mburu G. Chemwapg 1 * Foundations of Computer studies by Pepelapg 3 |  |
| **2** | **1** |  | CLASSIFICATION OF COMPUTERS | By the end of the lesson, the learner should be able to   * Classify computer according to physical size | | | Learner to   * In group of two identify and discuss pictures from books, magazines | * Charts or photographs from books, magazines or newspapers | * Gateway secondary Revision S.Mburu G. Chemwapg 7-8 |  |
|  | **2-3** |  | CLASSIFICATION OF COMPUTERS | * Classify computer according to functionality and according to purpose | | | * Discussion * Q/A | * Charts or photographs from books, magazines or newspapers | * Onunga and Renu Shah Page6 |  |
| **3** | **1** |  | DEVELOPMENT OF COMPUTERS | By the end of the lesson, the learner should be able to   * Explain how computers have developed | | | * Through brainstorming identify and discuss non-electronic tools | * Charts or photographs from books, magazines or newspapers | * Lomghorn Secondary. S.Mburu, G. Chemwa page 10 |  |
|  | **2-3** |  | ELECTRONIC COMPUTERS | * List five generations computers | | | * In group of three, discuss five generation computers | * Charts or photographs from books, magazines or newspapers | * Lomghorn Secondary. S.Mburu, G. Chemwa page 12-13 * Foundations of Computer studies by Pepelapg 22 |  |
| **4** | **1** |  | AREAS WHERE COMPUTER ARE USED | By the end of the lesson, the learner should be able to   * Identify areas where computers are used * Describe the listed areas where computers are used | | | Learner to   * Through brainstorming identify and discuss areas where computers are used | * Flash Cards | * Lomghorn Secondary. S.Mburu, G. Chemwa page 14-15 |  |
|  | **2-3** |  | * THE COMPUTER LABORATORY * MEASURES THAT PROTECT COMPUTER | * Define computer laboratory * Describe the safety precautions and practices that protect computer | | | * Through question and answer define computer laboratory * In group of three, discuss safety precautions and practices that protect computer | * UPS,Surge protector * charts | * Foundations of Computer studies by Pepelapg 47 |  |
| **5** | **1** |  | MEASURES THAT PROTECT USER | * Describe the safety precautions and practices that protect user | | | * In group of three, discuss safety precautions practices that protect user | * Antiglare standard furniture |  |  |
|  | **2-3** |  | PRACTICAL HANDS-ON SKILLS | By the end of the lesson, the learner should be able to   * Start up a computer * Restart a computer * Shutting down computer | | | * Through demonstration by the teacher, learner to observe and imitate on how to start up a computer, restart a computer and shut down computer | * Computer | * Gateway Secondary Revision, S.MburuG.Chemwapg 21-23 |  |
| **6** | **1** |  | KEYBOARD AND MOUSE SKILLS  KEYBOARD SKILLS | By the end of the lesson, the learner should be able to   * Define keyboard * Identify parts of the Keyboard | | | Learner to   * Through brainstorming define keyboard and identify parts of the Keyboard | * Computer keyboard * Mobile keyboard | * Gateway Secondary Revision, S.MburuG.Chemwapg 22 |  |
|  | **2-3** |  | KEYBOARD SKILLS | * Discuss parts of the keyboard * Type using keyboard | | | * In group of three, discuss parts of the keyboard and type using keyboard | * charts | * Foundations of Computer studies by Pepelapg 25 |  |
| **7** | **1** |  | TYPING TUTOR | * Identify typing tutors * Use typing tutors | | | * Through question and answer identify typing tutors and use typing tutors | * Typing tutor software computer |  |  |
|  | **2-3** |  | MOUSE SKILLS | * Define computer mouse * Identify parts of the mouse | | | * Through brainstorming define computer mouse and identify parts of the mouse | * Computer mouse | * Lomghorn Secondary. S.Mburu, G. Chemwa page 23 |  |
| **8** | **1** |  | MOUSE SKILLS | By the end of the lesson, the learner should be able to:   * Describe parts of mouse * Use mouse techniques | | | * In group of three, discuss parts of the mouse | * Computer mouse | * Foundations of Computer studies by Pepelapg 23-25 |  |
|  | **2-3** |  | MOUSE SKILLS | * Drag and drop items * Open file and folders through double clicking, right clicking | | | * Through demonstration by the teacher, learner to observe and imitate on how to drag and drop items | * Computer mouse | * Foundations of Computer studies by Pepelapg 23-25 |  |
| **COMPUTER SYSTEM** | | | | | | | | | | |
| **9** | **1** |  | COMPUTER SYSTEMS  INPUT DEVICES  (KEYING DEVICES | | | By the end of the lesson, the learner should be able to   * Describe computer system * Define input devices | Learner to   * Through brainstorming describe computer system * define input devices | * Computer system * PDA’s | * Longhorn Secondary. S.Mburu, G. Chemwa page 30-31 |  |
|  | **2-3** |  | INPUT DEVICES (KEYING DEVICES) | | | * List keying devices * Describe keying devices | * Through questions and answer, list keying devices, describe keying devices | * Computer Keyboard * PDA’s Keypad | * Foundations of Computer studies by Pepelapg 68 |  |
| **10** | **1** |  | POINTING DEVICES | | | * Define pointing devices * List pointing devices * Describe the listed pointing devices | * Through question and answer define scanning device * In group of three, describe the listed pointing devices | * Mouse * Joystick * Light pen | * Gateway Secondary Revision, S.MburuG.Chemwapg 30-34 |  |
| **11** | **END TERM 1 EXAM** | | | | | | | | | |
| **12** | **REVISION** | | | | | | | | | |
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| **COMPUTER FORM 1 SCHEMES OF WORK – TERM 2** | | | | | | | | | | |
| **COMPUTER SYSTEMS (cont)** | | | | | | | | | | |
| **WEEK** | **LESSON** | **TOPIC** | **SUB - TOPIC** | | **OBJECTIVES** | | **LEARNING/TEACHING ACTIVITIES** | **LEARNING/TEACHING RESOURCES** | **REFERENCES** | **REMARKS** |
| **1** | **1** |  | COMPUTER SYSTEMS  DIGITIZERS  SPEECH RECOGNITION DEVICES | | By the end of the lesson, the learner should be able to   * Define digitizer * List other input technologies * Describe the listed input technologies | | Learner to:   * Through question and answer define digitizer * Through brainstorming to list other input technologies * Through group discussion, discuss the listed input technologies | * Pictures from books and newspapers * PDA’s | * Lomghorn Secondary. S.Mburu, G. Chemwa page 37-38 * Foundations of Computer studies by Pepelapg 76 |  |
|  | **2-3** |  | CENTRAL PROCESSING UNIT | | By the end of the lesson, the learner should be able to   * Define term CPU * List functional elements of CPU | | * Through questions and answer define the term CPU * Through brainstorming, list and illustrate the functional elements of CPU | * A working personal computer | * Gateway Secondary Revision, S.MburuG.Chemwapg 40 * Foundations of Computer studies by Pepelapg 77 |  |
| **2** | **1** |  | CONTROL UNIT AND ARITHMETIC LOGIC UNIT | | * Describe the control Unit and Arithmetic Logic Unit | | * Through brainstorming, describe the Control Unit and Arithmetic Logic Unit | * Charts | * Longhorn Secondary. S.Mburu, G. Chemwa page 41-42 |  |
|  | **2-3** |  | MAIN MEMORY | | By the end of the lesson, the learner should be able to   * Classify computer memories * List examples of primary memory and secondary memory * State characteristics of RAM and ROM | | Learner to:   * Through question and answer classify computer memories * Trough brainstorming list examples of primary memory and secondary memory * Through questions and answer state characteristics of RAM and ROM | * Pictures from books * RAM module | * Gateway Secondary Revision, S.MburuG.Chemwapg 41-43 |  |
| **3** | **1** |  | SPECIAL PURPOSE MEMORIES | | * Define special purpose memory * List special purpose memories * Describe Cache memory and Buffers | | * Through question and answer define special purpose memory and list special purpose memories * Through brainstorming describe Cache memory and Buffers | * Input/output devices * microprocessor | * Foundations of Computer studies by Pepelapg 77 |  |
|  | **2-3** |  | SPECIAL PURPOSE MEMORIES | | * Define registers * List types of registers * Describe the listed types of registers | | * Through question and answer define registers and list types of registers * In group of five, discuss the listed types of registers | * Chart | * Longhorn Secondary. S.Mburu, G. Chemwa page 44-45 |  |
| **4** | **1** |  | MEMORY CAPACITY | | By the end of the lesson, the learner should be able to   * Define byte * Express memory quantities * Calculate memory quantities | | Learner to:   * Through questions and answer define byte * Through teachers demonstration, express memory quantities and calculate memory quantities | * RAM module * Flash cards | * Foundations of Computer studies by Pepelapg 79-80 |  |
|  | **2-3** |  | OVERALL FUNCTIONAL ORGANIZATION OF THE CPU | | * Define computer bus * List types of computer buses * Describe the listed computer buses * Give an illustration of the overall functional organization of the CPU | | * Through brainstorming, define computer bus * In group of five, discuss the listed types of computer buses * Through group discussion, illustrate the overall functional organization of the CPU | * Schematic diagram from the book | * Gateway Secondary Revision, S.MburuG.Chemwapg 48 |  |
| **5** | **1** |  | TYPES OF PROCESSORS | | * Classify processors * Discuss the listed processor classifications | | * Through question and answer Classify processors * Through group discussion, discuss the listed processor classification | * Photograph | * Gateway Secondary Revision, S.MburuG.Chemwapg 48 |  |
|  | **2-3** |  | TRENDS IN PROCESSORS TECHNOLOGY AND SPEED | | * List processors   Type  Manufactures  Year and speed | | * Through question and answer, list processors Type, manufactures, year and speed | * Photograph | * Longhorn Secondary. S.Mburu, G. Chemwa page 44-47 |  |
| **6** | **1** |  | OUTPUT DEVICES | | By the end of the lesson, the learner should be able to   * Define output device * Classify output devices * List softcopy output devices * Describe monitor as a soft copy output device | | Learner to:   1. Through question and answer define output device and classify output devices 2. Through group discussion, discuss the listed softcopy output devices | * CRT,LCD, TFT monitors * Speakers * LED | * Gateway Secondary Revision, S.MburuG.Chemwapg 51-60 * Foundations of Computer studies by Pepelapg 80 |  |
|  | **2-3** |  | MONITOR DISPLAY TERMINOLOGIES AND VIDEO GRAPHIC ADAPTERS | | * Define the terminologies used in monitor * List and describe the video graphic adapters | | * Through question and answer define terminologies * Through group discussion, describe the listed video graphic adapters | * Photograph from books | * Longhorn Secondary. S.Mburu, G. Chemwa page 49-52 |  |
| **7** | **1** |  | HARDCOPY OUTPUT DEVICES | | * Describe hard copy output devices | | * Through group discussion, describe hard copy output devices | * Printers * Pictures from magazines * Newspapers | * Foundations of Computer studies by Pepelapg 81 |  |
|  | **2-3** |  | HARD COPY OUTPUT DEVICES | | * List factors to consider when purchasing a printer | | * Through question and answer list factors to consider when purchasing a printer | * Printers * Pictures from magazines * Newspapers | * Longhorn Secondary. S.Mburu, G. Chemwa page 53 |  |
| **8** | **1** |  | SECONDARY STORAGE DEVICES AND MEDIA | | * List secondary storage media * Describe removable storage device | | * Through question and answer list secondary storage media * Through group discussion, describe removable storage device | * Flash disc * Floppy * Diskettes * Memory sticks * Compact disk * Hard disk | * Gateway Secondary Revision, S.MburuG.Chemwapg 61-69 |  |
|  | **2-3** |  | SECONDARY STORAGE DEVICES AND MEDIA | | By the end of the lesson, the learner should be able to   * Discuss fixed storage device | | * Through brainstorming, discuss fixed storage device | * Flash disc * Floppy * Diskettes * Memory sticks * Compact disk * Hard disk | * Foundations of Computer studies by Pepelapg 101 |  |
| **9** | **1** |  | POWER SUPPLY AND PERIPHERAL DEVICE INTERFACING | | * Distinguish between power and interface cables * Describe power cables | | * Through question and answer, distinguish between and interface cables | * Computer power cables * Interface cables | * Longhorn Secondary. S.Mburu, G. Chemwa page 65-67 |  |
|  | **2-3** |  | POWER SUPPLY AND PERIPHERAL DEVICE INTERFACING | | * Describe interfacing cables | | * Through discussion, describe interfacing cables | * Computer power cables * Interface cables | * Longhorn Secondary. S.Mburu, G. Chemwa page 65-67 |  |
| **10** | **1** |  | BASIC COMPUTER SET-UP AND CABLING | | By the end of the lesson, the learner should be able to   * Explain basic computer setup and cabling | | * Through teachers demonstration, explain basic computer setup and cabling | * Computer power cables * Interface cables | * Foundations of Computer studies by Pepelapg 101 |  |
|  | **2-3** |  | “” | | * Mount hard drives and optical drives | | * Through teachers demonstration, mount hard drives and optical drives | * Computer | * Foundations of Computer studies by Pepelapg 101 |  |
| **11** | **1** |  | COMPUTER SOFTWARE | | By the end of the lesson, the learner should be able to   * Distinguish between system software and application software | | * Through question and answer, distinguish between system software and application software | * Computer software’s | * Longhorn Secondary. S.Mburu, G. Chemwa page 73-76 |  |
|  | **2-3** |  | COMPUTER SOFTWARE | | * Classify software according to purpose | | * Through brainstorming, classify software according to purpose | * Computer software’s | * Foundations of Computer studies by Pepelapg 143-144 |  |
| **12** | **1** |  | COMPUTER SOFTWARE | | * Classify software according to acquisition | | Through brainstorming, classify software according to acquisition | * Computer software’s | * Foundations of Computer studies by Pepelapg 143-144 |  |
|  | **2-3** |  | COMPUTER SOFTWARE | | * Classify software according to end user- License * Evaluate criteria for selecting computer system | | * Through brainstorming, classify software according to user- License * Through question and answer, Evaluate criteria for selecting computer system | * Computer software’s | * Foundations of Computer studies by Pepelapg 143-144 |  |
| **13** | **END TERM EXAM AND REVISION** | | | | | | | | |  |
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| **COMPUTER FORM 1 SCHEMES OF WORK – TERM 3** | | | | | | | | | | |
| **OPERATING SYSTEM (OS)** | | | | | | | | | | |
| **WEEK** | **LESSON** | **TOPIC** | **SUB - TOPIC** | | **OBJECTIVES** | | **LEARNING/TEACHING ACTIVITIES** | **LEARNING/TEACHING RESOURCES** | **REFERENCES** | **REMARKS** |
| **1** | **1** |  | DEFINITION OF AN OPERATING SYSTEM | | By the end of the lesson, the learner should be able to   * Illustrate an operating system as a supervisor of hardware and application software | | Learner to   * Identify operating system used by the computer | * Charts * computer | * Longhorn Secondary. S.Mburu, G. Chemwa page 82 * Foundations of Computer studies by Pepelapg 155 |  |
|  | **2-3** |  |  | | * Identify parts of operating system | | * Through brainstorming describe parts of the operating system | * Charts * computer | * Longhorn Secondary. S.Mburu, G. Chemwa page 82 * Foundations of Computer studies by Pepelapg 155 |  |
| **2** | **1** |  | FUNCTION OF AN OPERATING SYSTEM | | By the end of the lesson, the learner should be able to   * List devices under the operating system | | * Through questions and answers, list devices under control of operating system | * Flash Cards | * Longhorn Secondary. S.Mburu, G. Chemwa page 83-85 |  |
|  | **2-3** |  | DEVICES UNDER THE OPERATING SYSTEM CONTROL | | * State functions of an operating system in resource management | | * Through brainstorming, state functions of operating system | * Computer * Operating system * software | * Gateway Secondary Revision, S.MburuG.Chemwapg 87 |  |
| **3** | **1** |  | TYPES OF OPERATING SYSTEM | | By the end of the lesson, the learner should be able to   * List types of operating system | | Learner to   1. List and describe types of operating system | * PC’s loaded with different operating systems, pupils book part 3,4 | * Longhorn Secondary. S.Mburu, G. Chemwa page 83-85 |  |
|  | **2-3** |  |  | | Describe:   * Single program and multitasking operating system | | 1. Draw a summary diagram of various operating system types | * PC’s loaded with different operating systems, pupils book part 3,4 | * Foundations of Computer studies by Pepelapg 170 |  |
| **4** | **1** |  |  | | * Multi- user and single user operating system | | * Draw a summary diagram of various operating system types | * Chart | * Foundations of Computer studies by Pepelapg 170 |  |
|  | **2-3** |  |  | | * Command line, menu driven and graphical user interface operating system | | * Draw a summary diagram of various operating system types | * Chart | * Gateway Secondary Revision, S.MburuG.Chemwapg 90-91 |  |
| **5** | **1** |  | HOW OPERATING SYSTEM ORGANIZE INFORMATION | | By the end of the lesson, the learner should be able to   * State and explain factors that dictate file organization | | * Identify features on windows desktop | * PC loaded with any version of windows | * Longhorn Secondary. S.Mburu, G. Chemwa page 89-94 |  |
|  | **2-3** |  |  | | * Describe files, folders and drives * Start Microsoft windows | | * Identify features on windows desktop | * PC loaded with any version of windows | * Longhorn Secondary. S.Mburu, G. Chemwa page 89-94 |  |
| **6** | **1** |  | MANAGING FILE AND FOLDERS | | By the end of the lesson, the learner should be able to   * Distinguish between folder and directory * Draw directory (folder) tree | | Learner to   * Create folder in both Graphical user interface and MS-DOS | * Flash cards | * Longhorn Secondary. S.Mburu, G. Chemwa page 95-97 |  |
|  | **2-3** |  | MANAGING FILE AND FOLDERS | | * Create ne files and folders * Identify parts of an application window | |  | * Flash cards | * Longhorn Secondary. S.Mburu, G. Chemwa page 95-97 |  |
| **7** | **1** |  |  | | * Save changes to a file * Rename files or folders * Copy, move, sort files and folders | | Learner to   * Save changes to a file, rename files and folders | * Personal computer loaded with any version of windows | * Longhorn Secondary. S.Mburu, G. Chemwa page 95-97 |  |
|  | **2-3** |  |  | | * Manipulate files and folders using   Short cut menu, drag and drop  Selecting multiple files and folders  Searching for files and folders | | * In group of two, manipulate files and folders using   Shortcut menu, drag and drop  Selecting multiple files and folders  Searching for files and folders | * Personal computer loaded with any version of windows | * Longhorn Secondary. S.Mburu, G. Chemwa page 90 |  |
| **8** | **1** |  | DISK MANAGEMENT USING WINDOWS | | By the end of the lesson, the learner should be able to   * Format disk * Back-up data | | Learner to:  In group of three   * Format disk * Back-up data | * Personal computer loaded with any version of windows | * Longhorn Secondary. S.Mburu, G. Chemwa page 106-113 |  |
|  | **2-3** |  |  | | * scan problems related to disk * defragment a disk | | In group of three   * use scan disk to detect disk errors * defragment a disk | * floppy diskette * flash disk | * Longhorn Secondary. S.Mburu, G. Chemwa page 106-113 |  |
| **9** | **1** |  |  | | * Compress files within a disk * Scan a disk for virus | | In a group of three   * Compress a disk | * floppy diskette * flash disk | * Longhorn Secondary. S.Mburu, G. Chemwa page 106-113 |  |
|  | **2-3** |  |  | | * Create/restore back-up data * Create startup disk * Partition a disk | | In group of three   * Partition a disk | * Un partition * Hard disk | * Longhorn Secondary. S.Mburu, G. Chemwa page 106-113 |  |
| **10** | **1** |  | INSTALLATION AND CONFIGURING AN OPERATING SYSTEM | | By the end of the lesson, the learner should be able to   * Know installation requirements | | Learner to   * List installation requirement * Describe the listed installation requirements | * Personal computer without an operating system | * Longhorn Secondary. S.Mburu, G. Chemwa page 114-117 |  |
|  | **2-3** |  |  | | * Install operating system | | * With the help of the teacher install operating system | * Installation and start up disk * Manufactures documentations | * Foundations of Computer studies by Pepelapg 170 |  |