SCHEME OF WORK COMPUTER STUDIES FORM 3 2022

TERM I ENDARASHA BOYS

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| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REMARKS** |
| **2** | 1 | Data representation in a computer | Introduction | By the end of the lesson, the learner should be able to:  Define data and information Classify computers according to functionality with illustration | Explaining Demonstration Discussions | Newspaper Books internet | Longhorn Secondary Computer studies Form 3, pages1-2 |  |
| 2-3 | Data representation in a computer | Data representation Data representation | By the end of the lesson, the learner should be able to:  Represent data in digital circuits  Represent data on magnetic media  Represent data on optical media | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 3 Longhorn Secondary Computer studies Form 3, pages 5-6 |  |
| 4 | Data representation in a computer | Types of data representation | By the end of the lesson, the learner should be able to:  Represent data in decimal number system Represent data in binary number system | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 6-8 |  |
| **3** | 1 | Data representation in a computer | Types of data representation | By the end of the lesson, the learner should be able to:  Represent data in actual number system Represent data in hexadecimal number system | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 8-9 |  |
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|  | 2-3 | Data representation in a computer | Further conversion of numbers Further conversion of numbers Converting octal numbers | By the end of the lesson, the learner should be able to:  Convert binary number to decimal number system  Convert decimal numbers to binary system  Convert binary fraction to decimal number system  Convert decimal fraction numbers to binary system  Convert octal numbers to decimal numbers Convert octal numbers to binary numbers | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 11-13 Longhorn Secondary Computer studies Form 3, pages 17-19 |  |
| 4 | Data representation in a computer | Converting octal numbers | By the end of the lesson, the learner should be able to:  Convert hexadecimal numbers to decimal numbers  Convert hexadecimal numbers to binary numbers | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 20-22 |  |
| **4** | 1 | Data representation in a computer | Symbolic representation using coding schemes | By the end of the lesson, the learner should be able to:  Explain the binary coded decimal code as a representation scheme | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 23 |  |
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|  | 2-3 | Data representation in a computer | Symbolic representation using coding schemes Symbolic representation using coding schemes Binary arithmetic operations | By the end of the lesson, the learner should be able to:  Explain the extended binary coded decimal interchange code (EBCDIC)  Explain the American Standard Code for information interchange (ASCII)  Represent signed binary numbers using prefixing an extra sign bit to a binary number and ones complement | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 23 Longhorn Secondary Computer studies Form 3, pages 23-25 |  |
| 4 | Data representation in a computer | Binary additions | By the end of the lesson, the learner should be able to:  Perform seven possible binary additions | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 25-27 |  |
| **5** | MID TERM BREAK AND EXAMS | | | | | | | |
| **6** | 1 | Data representation in a computer | Binary subtraction | By the end of the lesson, the learner should be able to:  Perform possible binary subtraction using direct subtraction | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 27-28 |  |
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|  | 2-3 | Data representation in a computer Data processing | Binary subtraction Binary subtraction Introduction | By the end of the lesson, the learner should be able to:  Perform possible binary subtraction using one complement  Perform possible binary subtraction using twos complements  Define data information and data processing | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 28-29 Longhorn Secondary Computer studies Form 3, pages 32 |  |
| 4 | Data processing | Data processing cycle | By the end of the lesson, the learner should be able to:  List stages of data processing  Describe each stage of data processing | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 32-33 |  |
| **7** | 1 | Data processing | Data processing cycle | By the end of the lesson, the learner should be able to:  Explain the data input | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 34 |  |
| 2-3 | Data processing | Data processing cycle Description of errors in data processing Data integrity | By the end of the lesson, the learner should be able to:  Define processing Explain the sorting of data  Explain the errors in data processing  Explain the data integrity | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 34 Longhorn Secondary Computer studies Form 3, pages 36-37 |  |
| 4 | Data processing | Data processing methods | By the end of the lesson, the learner should be able to:  List and describe the methods of data processing | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 37-39 |  |

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| **8** | 1 | Data processing | Computer files | By the end of the lesson, the learner should be able to:  Define computer files Give the types of computer files | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 39 |  |
| 2-3 | Data processing | Elements of a computer file Classification of computer files  Types of computer files | By the end of the lesson, the learner should be able to:  List the elements of a computer  Describe the listed elements of a computer Classify computer Differentiate between logical and physical computer files  Discuss the types of computer processing files | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 39-40 Longhorn Secondary Computer studies Form 3, pages 40-41 |  |
| 4 | Data processing | File organization methods | By the end of the lesson, the learner should be able to:  Discuss the file organization methods | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 41-42 |  |
| **9** | 1 | Data processing | File organization methods | By the end of the lesson, the learner should be able to:  Explain the random or direct file organization | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 42 |  |
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|  | 2-3 | Data processing | File organization methods Electronic data processing modes | By the end of the lesson, the learner should be able to:  Explain the serial file organization Describe electronic  modes for electronic data processing  Describe time-sharing, batch processing, multiprocessing and multiprogramming | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 43 Longhorn Secondary Computer studies Form 3, pages 44-45 |  |
| 4 | Data processing | Electronic data processing modes | By the end of the lesson, the learner should be able to:  Explain advantages of electronic processing Explain disadvantages of electronic processing | Explaining Demonstration Discussions | Newspaper Books Internet | Longhorn Secondary Computer studies Form 3, pages 45-46 |  |
| **10** | END OF TERM EXAMS | | | | | | | |