# **your school name SECONDARY SCHOOL**

# **COMPUTER STUDIES SCHEMES OF WORK**

# **FORM THREE 2021**

# **TERM 2**

# **REFERENCES**

1. Longhorn Book 3
2. Computer studies by.Dr.onunga and Runu Shah
3. Foundations of comp

**Teacher:** MR/s/Miss. ……………..

**Classes:** Achievers, Winners

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **LEARNING OBJECTIVES** | **TEACHING/LEARNING ACTIVITIES** | **RESOURCES** | **REFERENCES** | **REMARKS** |
| **1** | **1 & 2** | **Spreadsheets** | introduction | *By the end of the lesson, the learner should be able to:*define the term spreadsheet, explain two types of spreadsheet, outline advantages of using electronic, Application areas of spreadsheets, name examples of spreadsheet, explain the components of spreadsheet | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 52-55 |  |
| **2 & 3** | **Spreadsheets** | Creating a worksheet | *By the end of the lesson, the learner should be able to:*explain the procedure of starting Microsoft excel, explain on various parts of Microsoft excel window: title bar, the menu bar, formula bar, state the components of the worksheet, navigate the Microsoft excel screen | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 57-60 |  |
| **2** | **1 & 2** | **Spreadsheets** | Selecting multiple ranges | *By the end of the lesson, the learner should be able to:*select multiple ranges using shift key or control with combination of a mouse, hide row/column, save a worksheet and retrieve worksheet, explain on cell data type | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 64-67 |  |
| **2 & 3** | **Spreadsheets** | Cell referencing | *By the end of the lesson, the learner should be able to:*define the term cell referencing, two methods used in cell referencing, define the terms: relative, absolute referencing, explain on referencing using labels and names, create a named range | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 67-69 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **LEARNING OBJECTIVES** | **TEACHING/LEARNING ACTIVITIES** | **RESOURCES** | **REFERENCES** | **REMARKS** |
| **5** | **1 & 2** | **Spreadsheets** | Basic factions and formulae | *By the end of the lesson, the learner should be able to:*leaner to manipulate statistical functions:average, count, max, min, modeexplain on logical functions, manipulate the mathematical functions, state the order of execution | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 70-72 |  |
| **2 & 3** | **Spreadsheets** | Editing a worksheet | *By the end of the lesson, the learner should be able to:*copy and move data, explain on worksheet formatting, format text and numbers | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 73-75 |  |
| **6** | **1 & 2** | **Spreadsheets** | Subtotals functionData management | *By the end of the lesson, the learner should be able to:*carryout sorting of data, filter data, manipulate auto filter, type the data of the spreadsheet, calculate subtotals, state the types of charts, create the charts | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 87-88 |  |
| **2 & 3** | **Spreadsheets** |  | *By the end of the lesson, the learner should be able to:** manipulate data ranges
* set the label
* set the heading and titles
* set the legends
* set page setup
* preview the document
* set printing options
* explain the meaning of page orientation and print
 | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 89-91 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **LEARNING OBJECTIVES** | **TEACHING/LEARNING ACTIVITIES** | **RESOURCES** | **REFERENCES** | **REMARKS** |
| **7** | **1 & 2** | Elementary Programming Principles | IntroductionLevels of programming languages | ***By the end of the lesson, the learner should be able to:***define the terms: programming , syntax, explain the terms: source code, object code, translators ,assembler, interpreter, compiler, differentiate between the interpreter and compiler, name two level of programming, languages and give examples | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 73-78 |  |
| **2 & 3** | Elementary Programming Principles | Fourth generation languages (4 GLs)Web scripting language | explain the importance of application generator, give examples of forth generation languages, give examples of OOP, explain the meaning of encapsulation, state reasons why HTML is not a true programming language, enter the codes in the program editors window | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 73-78 |  |
| **8** | **1 & 2** | Elementary Programming Principles | Advantages and disadvantage of low-level and high-level languagesProgram development | explain the advantages and disadvantages of low level languages, explain the advantages and disadvantages of high level languagesstate, explain, discuss six stages of program development | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 78-89 |  |
| **2 & 3** | Elementary Programming Principles | Program designProgram testing and debugging | explain the meaning of program design, explain the characteristics of non-modular program and a modular program, compare, define the terms: syntax errors & logical errors, explain methods for testing the programs for error, explain the meaning of system implementation and maintenance | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 89-93 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WEEK** | **LESSON** | **TOPIC** | **SUB-TOPIC** | **LEARNING OBJECTIVES** | **TEACHING/LEARNING ACTIVITIES** | **RESOURCES** | **REFERENCES** | **REMARKS** |
| **9** | **1 & 2** | Elementary Programming Principles | Development of algorithms and program flowchart. | ***By the end of the lesson, the learner should be able to:***define the terms: algorithm, pseudo code, flowchartoutline the guideline for designing a good pseudo code, explain the guideline for drawing a flowchart | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 89-93 |  |
| **2 & 3** | Elementary Programming Principles | Comparison between a pseudo code and a flowchart, program control structures | compare between a pseudo code and a flowchartgo through the examples of a flowchart | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 89-93 |  |
| **10** | **1 & 2** | Elementary Programming Principles | Program control structures | explain the meaning of control structuresstate three control structures | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 96-99 |  |
| **2 & 3** | Elementary Programming Principles | Program control structures | explain on sequence and selection control structure | * Q and A
* Lecture Method
* Demonstration
* Discussion Sessions
 | Charts and PicturesProjectorPCTeacher NotesCourse books | Longhorn Bk 2 Computer StudiesBy S. Mburu & G. hemwaP 93-95 |  |
| 11 | EVALUATION AND CLOSING OF SCHOOL |