

**SCHEME OF WORK (CBET CLASSES)**

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| **DEPARTMENT: ICT** | | | | **NAME OF TRAINER: DUNCAN NDEGWA** | | | **NUMBER OF TRAINEES: 2** | | |
| **UNIT CODE: IT/OS/ICT/CR/10/5** | | | | **TERM: I** | **DATE OF PREPARATION: 22/0/2025** | | **CLASS: CICT/S23** | | |
| **COURSE: ICT TECHNICIAN** | | | | | | | **LEVEL: 5** | | |
| UNIT OF COMPETENCE:  DEVELOP COMPUTER PROGRAM | | | | | | | **DATE OF REVISION: 11/5/2025** | | |
| **SCHEDULE** | | | | | | | | | |
| **WEEK** | **NUMBER OF HOURS** | **ELEMENT / LEARNING OUTCOME** | **SUB -TOPIC/ CONTENT** | **SPECIFIC OBJECTIVES / PERFORMANCE CRITERIA** | | **ACTVITIES** | | **REFERENCE/ RESOURCES** | **REMARKS** |
|  | 4 | Identify program and programming concepts | * Definitions: * Compilers, linking/loading and executing of programs, | * Definition of program and programming is done * Programming concepts are identified | | * Taking notes * Class discussion * Questions and answers | | * E-books   Dijkstra, E. W. (2002). *Ewd 1308: What led to “notes on structured programming”* (pp. 340-346). Springer Berlin Heidelberg. |  |
|  | 4 | Identify Types of programming languages | * Imperative * Declarative * Functional * Object Oriented | * Types of programming languages are identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Dijkstra, E. W. (2002). *Ewd 1308: What led to “notes on structured programming”* (pp. 340-346). Springer Berlin Heidelberg. |  |
|  | 4 | Identify Approaches of program development | * Qualities of a good program | * Approaches of program development are identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Dijkstra, E. W. (2002). *Ewd 1308: What led to “notes on structured programming”* (pp. 340-346). Springer Berlin Heidelberg. |  |
|  | 4 | Identify Process of creating programs | * Program development cycle | * Phases of program development are identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Dijkstra, E. W. (2002). *Ewd 1308: What led to “notes on structured programming”* (pp. 340-346). Springer Berlin Heidelberg. |  |
|  | 4 | Identify Activities that take place during Program Development | * Program Development Activities | * Activities that take place during Program Development are identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Dijkstra, E. W. (2002). *Ewd 1308: What led to “notes on structured programming”* (pp. 340-346). Springer Berlin Heidelberg. |  |
|  | 4 | Identify Program design and Analysis tools | * Flowcharts * Pseudocode | * Program design and Analysis tools are identified * Algorithm writing tools are identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Mall, R. (2018). *Fundamentals of software engineering*. PHI Learning Pvt. Ltd.. |  |
|  | 4 | Identify Program design and Analysis tools | * Modular charts * Decision tables * Decision trees | * Program design and Analysis tools are identified * Algorithm writing tools are identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Mall, R. (2018). *Fundamentals of software engineering*. PHI Learning Pvt. Ltd.. |  |
|  | 4 | Identify System development methodologies | * Waterflow * Agile | * System development methodologies are identified * Criteria for choosing the appropriate methodology is done | | * Taking notes * Class discussion   Questions and answers | | * E-books   Mall, R. (2018). *Fundamentals of software engineering*. PHI Learning Pvt. Ltd... |  |
|  | 4 | Identify System development methodologies | * Prototyping * Incremental * Spiral | * System development methodologies are identified * Criteria for choosing the appropriate methodology is done | | * Taking notes * Class discussion   Questions and answers | | * E-books   Mall, R. (2018). *Fundamentals of software engineering*. PHI Learning Pvt. Ltd.. |  |
|  | 4 | Criteria for choosing the appropriate methodology | * Factors to consider when choosing a system development methodology | * Criteria for choosing the appropriate methodology is done | | * Taking notes * Class discussion   Questions and answers | | * E-books   Mall, R. (2018). *Fundamentals of software engineering*. PHI Learning Pvt. Ltd.. |  |
|  | 4 | Introduction to structured programming | * Introduction to c | * Format of a computer program is identified | | * Taking notes * Class discussion   Questions and answers | | * E-books   Dijkstra, E. W. (2002). *Ewd 1308: What led to “notes on structured programming”* (pp. 340-346). Springer Berlin Heidelberg. |  |
|  | **REVISION AND EXAMINATIONS** | | | | | | | | |

Trainers Sign…………………. HOD’s Name....................………...Sign and stamp…………… Date………….

CHECKED BY VERIFIED BY:

NAME: NAME:

DESIGNATION DESIGNATION