| Discipline: Math & Science | Semester : 1 st Sem:2020-21 | Name of the Teaching Faculty: Mrs. Banani Mohanty, Lecturer in Computer science |
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| Subject: COMPUTER APPLICATION | No. of Days/week Class Allotted: 60 | Semester from date: 09/11/2020 to date: 31 /03 /2021 No of weeks: 15 |
| week | Class Day | Theory Topics |
| 1st | 1 _{st} | Introduction to Computer Evolution of Computers |
| | 2 _{nd} | Generation of Computers |
| | 3rd | Classification of Computers |
| | 4 _{th} | Basic Organisation of Computer (Functional Block diagram) Input Devices, CPU & Output Devices. |
| 2 _{nd} | 1 _{st} | Computer Memory and Classification of Memory |
| | 2nd | Software concept, System software, Application software Overview of Operating System |
| 210 | 3rd | Objectives and Functions of O.S , |
| | 4 _{th} | Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS |
| | 1 _{st} | Features of DOS, Windows and UNIX |
| 3 rd | 2 _{nd} | Programming Languages Compiler, interpreter |
| | 3rd | Computer Virus, Different Types of computer virus Detection and prevention of Virus |
| | 4 _{th} | Application of computers in different Domain |
| | 1 _{st} | Networking concept, Protocol, Connecting Media, |
| | 2nd | Data Transmission mode |
| 4 th | 3rd | Network Topologies: concept, Mesh & star topology: advantages, disadvantages |
| | 4 _{th} | Ring, bus and tree topology: advantages, disadvantages |
| 5 th | 1 _{st} | Types of Network : LAN,MAN,WAN,PAN |
| | 2 _{nd} | Networking Devices like Hub, Repeater, Switch, Bridge, |
| | 3rd | Other Networking Devices like Router, Gateway & NIC. Internet Services like E-Mail, WWW, FTP |
| | 4 _{th} | Internet Services like Chatting, Internet Conferencing, Electronic Newspaper & Online Shopping Different types of Internet connectivity and IS |
| 6 th | 1 _{st} | FILE MANAGEMENT AND DATA PROCESSING Concept of File and Folder, File Storage. |
| | 2nd | File Access methods. Sequential, Direct, ISAM |
| | 3rd | Data Capture, Data storage, Data Processing and Retrieval |

| | 4 _{th} | PROBLEM SOLVING METHODOLOGY: Algorithm, Pseudo code and Flowchart |
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| 7 th | 1 st | Examples of Problem solving through Algorithm ,Flowchart |
| | 2nd | Examples of Problem solving through Algorithm & Flowchart |
| | 3rd | Examples of Problem solving through Algorithm & Flowchart |
| | 4 _{th} | Examples of Problem solving through Algorithm & Flowchart |
| 8 th | 1st | Generation of Programming Languages, Structured Programming Language |
| | 2 _{nd} | OVERVIEW OF C PROGRAMMING LANGUAGE Character set, Keywords in C, first C program, header file |
| | 3rd | Constants, Variables, classification of Data types in C |
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| | 4th | Basic Data types: int, float, char |
| 9 th | 1 st | Managing Input and Output operations. |
| | 2 _{nd} | Operators, Expressions, types of operators: arithmetic, assignment with examples |
| | 3rd | logical, relational, conditional with examples, |
| | 4 _{th} | increment & decrement operator |
| 10 th | 1 st | bitwise operator, Type conversion & Typecasting |
| | 2 _{nd} | Decision Control Statements (If, If-else) |
| | 3rd | Nested if else and else if ladder statement with programs |
| | 4 _{th} | Programming Assignments using the above features. |
| 11 th | 1 _{st} | Switch statements with programs |
| | 2 _{nd} | Looping Statements (While) with Programming examples |
| | 3rd | Do while and for statement with Programming examples |
| | 4 _{th} | Break, Continue & goto statements Programming Assignments using the above features. |
| 12 th | 1 st | One Dimensional Array concept: declaration, initialization, memory representation diagram |
| | 2 _{nd} | Programs using 1d Array, Multidimensional Array concept, declaration, initialization |
| | 3rd | String Operations, string handling functions |
| | 4 _{th} | Pointers: Pointer Expression and Pointer Arithmetic Programming Assignments using the above features. |
| 13 th | 1st | Functions: definition, parts of function, syntax with programming examples |
| | 2 _{nd} | Programming Assignments using function. |
| | 3rd | Functions and Passing Parameters to the Function (Call by Value and Call by Reference) |
| | 4 _{th} | Scope of Variables and features. Storage Classes |
| 14 th | 1 st | Recursion Function and Types of Recursion |
| 14 | 2nd | Structure and Union (Only concepts) |
| | 3rd | Programming Assignments |
| | 4 _{th} | Programming Assignments |
| 15 th | 1 st | Revision of Chapters(1-4) |
| | 2nd | Revision of Chapters(5-7) |

| 3rd | Discussion of Previous year Questions and Answers |
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| 4 _{th} | Discussion of Probable Questions and Answers |