| Discipline: Math \& Science | Semester : <br> $1^{\text {ST }}$ Sem $\& 2^{\text {ND }}$ SEM | Name of the Teaching Faculty: Mrs. BananiMohanty, Lecturer in Computer science |
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| Subject: <br> COMPUTER <br> APPLICATION | No. of Days/week Class Allotted: 60 | No of weeks: 15 |
| week | Class Day | Theory Topics |
| 1st | 1st | Introduction to Computer Evolution of Computers |
|  | 2nd | Generation of Computers |
|  | 3rd | Classification of Computers |
|  | 4th | Basic Organisation of Computer (Functional Block diagram) Input Devices, CPU \& Output Devices. |
| 2nd | 1st | Computer Memory and Classification of Memory |
|  | 2nd | Software concept, System software, Application software Overview of Operating System |
|  | 3rd | Objectives and Functions of O.S , |
|  | 4th | Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS |
| $3^{\text {rd }}$ | 1st | Features of DOS, Windows and UNIX |
|  | 2nd | Programming Languages Compiler, interpreter |
|  | 3rd | Computer Virus, Different Types of computer virus Detection and prevention of Virus |
|  | 4th | Application of computers in different Domain |
| $4^{\text {th }}$ | 1st | Networking concept, Protocol, Connecting Media, |
|  | 2nd | Data Transmission mode |
|  | 3rd | Network Topologies: concept, Mesh\& star topology: advantages, disadvantages |
|  | 4th | Ring, bus and tree topology:advantages,disadvantages |
| $5^{\text {th }}$ | 1st | Types of Network : LAN,MAN,WAN,PAN |
|  | 2nd | Networking Devices like Hub, Repeater, Switch, Bridge, |
|  | 3rd | Other Networking Devices like Router, Gateway \& NIC. Internet Services like E-Mail, WWW, FTP |
|  | 4th | Internet Services like Chatting, Internet Conferencing,Electronic Newspaper \& Online Shopping <br> Different types of Internet connectivity and IS |
| 6th | 1st | 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 |


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


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

