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| **S. No** | **Name of the Topic** | **Reference Book** | **Delivery Method** |
|  | **UNIT-1:Flowcharts design through Raptor** |  |  |
| 1 | Introduction to Computer Basics | T2(1.2 –1.3),W1 | Chalk & Talk |
| 2 | Algorithm: procedure to write an algorithm | R5(3-6) | Chalk & Talk |
| 3 | Flow chart symbols, Input/ Output | R5(15-16) | Chalk & Talk |
| 4 | Assignment, operators | R5(17-18) | Chalk & Talk |
| 5 | conditional if, repetition, | R5(40-41) | Chalk & Talk |
| 6 | Finding  maximum of 3 numbers | R5(45-46) | Chalk & Talk |
| 7 | Unit converters: Kilogram to gram/lit to milli lit | R5(47-48) | Chalk & Talk |
| 8 | Interest calculators: simple and compound | R5(46-47) | Chalk & Talk |
| 9 | multiplication tables, | W3 | Chalk & Talk |
| 10 | GCD of 2  numbers | W3 | Chalk & Talk |
| 11 | function and sub charts. | R5(79-82) | Chalk & Talk |
| 12 | Fibonacci generation, prime number generation. | W3 | Chalk & Talk |
| 13 | Minimum, Maximum and average of n numbers. | W3 | Chalk & Talk |
| 14 | Factorial of a Number | W3 | Chalk & Talk |
| 15 | Finding total, percentage & grade for given marks | R5(45-47) | Chalk & Talk |
| 16 | Swapping of two Numbers | R5(16-17) | Chalk & Talk |
|  | **Unit-2:C Basics** |  |  |
| 17 | C-character set, Data types | T2(2.2-2.3) | Chalk & Talk |
| 18 | Constants, Expressions, Structure of C program | T2(2.4-2.10), T2(2.12-2.13) | Chalk & Talk |
| 19 | Op*er*ators | T2(2.14-2.32) | Chalk & Talk |
| 20 | Operators | T2(2.14-2.32) | Chalk & Talk |
| 21 | Operators example programs | T2(2.14-2.32) | Chalk & Talk |
| 22 | Operators and their precedence & associatively | T2(2.14-2.32) | Chalk & Talk |
| 23 | Simple programs in C using all the operators | T2(2.14-2.32),w4 | Chalk & Talk |
| 24 | Type casting ,type coercion | T2(2.14-2.32),W5 | Chalk & Talk |
|  | **Unit-3 Control Structures and Functions** | T1(5.1 ) | Chalk & Talk |
| 25 | If-statements | T1(5.2-5.6) | Chalk & Talk |
| 26 | Switch statements | T1(5.7 ) | Chalk & Talk |
| 27 | While, do-while | T1(6.2-6.3 ) | PPT1 |
| 28 | For loop | T1(6.4 ) | PPT1 |
| 28 | Unconditional statements | T1(6.5) | Chalk & Talk |
| 30 | Basic input and output statements | T1(4.4-4.5) | Chalk & Talk |
| 31 | Functions: Concept of a function | T1(9.1-9.5) | Chalk & Talk |
| 32 | Types of functions, More Information On Functions | T1(9.7-9.9) | Chalk & Talk |
| 33 | passing the parameters, | T1(9.10-9.14), | Chalk & Talk |
| 34 | Storage classes | T1(2.9) |  |
| 35 | Recursion, types of recursion | T1(9.6) | Chalk & Talk |
| 36 | Simple recursive and non recursive programs | T1(7.26-7.29) | Chalk & Talk |
| 37 | Towers of Hanoi problem, | T1(7.29-7.33) | PPT2 |
|  | **Unit 4:Arrays and pointers** |  |  |
| 38 | iteration vs recursion | R5 | Chalk & Talk |
| 39 | Arrays: Single and Two Dimensional Array | T1(7.1-7.7) | Chalk & Talk |
| 40 | multidimensional Arrays | T1(7.8-7.9) | Chalk & Talk |
| 41 | Character array as a string | T1(8.1-8.7) | Chalk & Talk |
| 42 | String functions, | T1(8.8) | Chalk & Talk |
| 43 | String manipulation | T1(8.8) | Chalk & Talk |
| 44 | Programs using arrays | R4(360-368) | Chalk & Talk |
| 45 | Programs using double dimension Arrays | R4(370-380) | Chalk & Talk |
| 46 | Pointers declarations | T1(11.4-11.6) | Chalk & Talk |
| 47 | Pointer expressions | T1(11.8) | Chalk & Talk |
| 48 | Pointer parameters to functions. | T1(11.13) | Chalk & Talk |
| 49 | Pointers and array, Pointer arithmetic | R4(410-415) | Chalk & Talk |
|  | **Unit 5: Structures and Files** |  |  |
| 50 | Structures | T1(10.1-10.2) | Chalk & Talk |
| 51 | Declaring and using structures | T1(10.3-10.4) | Chalk & Talk |
| 52 | operations on structures, structures and arrays | T1(10.7), W5 | Chalk & Talk |
| 53 | pointers to structures, | T1(11.16) | Chalk & Talk |
| 54 | user defined data types, | R4(419-423) | Chalk & Talk |
| 55 | Command line arguments | R4(419-423) | Chalk & Talk |
| 56 | Files: Introduction, file structure | T1(12.1-12.3), | Chalk & Talk |
| 57 | file handling functions | T1(12.5) | Chalk & Talk |
| 58 | file error handling, Programs using file functions | R4(456-458) | Chalk & Talk |
| 59 | Revision | All syllabus |  |

**Text Books:**

1. Programming in ANSI in C,E.Balaguruswamy,Tata McGraw Hill,6th Edition.
2. C Programming – AnithaGoel/Ajay Mittal/E.Sreenivasa Reddy-Pearson India

**References :**

1.. C Programming- Behrouz A forouzan – CENGAGE Learning

2.Test your c skills-Yaswanthkanithker

3..Let us C- Yaswanthkanithker

4..c-programming -oxford

**Web Resources:**

W1: [www.tutorialspoint.com/](http://www.tutorialspoint.com/computer_fundamentals)**[computer](http://www.tutorialspoint.com/computer_fundamentals)**[\_](http://www.tutorialspoint.com/computer_fundamentals)**[fundamentals](http://www.tutorialspoint.com/computer_fundamentals)**

W2: [https://en.wikipedia.org/wiki/](https://en.wikipedia.org/wiki/Memory_hierarchy)**[Memory](https://en.wikipedia.org/wiki/Memory_hierarchy)**[\_](https://en.wikipedia.org/wiki/Memory_hierarchy)**[hierarchy](https://en.wikipedia.org/wiki/Memory_hierarchy)**

W3: cprogrammingcodes.blogspot.com/2011/.../**algorithms**-and-**flowchart**.ht..

W4: [www.tutorialspoint.com/](http://www.tutorialspoint.com/cprogramming/c_operators.htm)**[cprogramming](http://www.tutorialspoint.com/cprogramming/c_operators.htm)**[/](http://www.tutorialspoint.com/cprogramming/c_operators.htm)**[c](http://www.tutorialspoint.com/cprogramming/c_operators.htm)**[\_](http://www.tutorialspoint.com/cprogramming/c_operators.htm)**[operators](http://www.tutorialspoint.com/cprogramming/c_operators.htm)**[.htm](http://www.tutorialspoint.com/cprogramming/c_operators.htm)

W5: www.careerride.com/c-**structures-and-arrays**.aspx

**Signature of the faculty**