

Bhoj Reddy Engineering College for Women: Hyderabad
Department of Information and Technology
Lesson plan of faculty member for the academic year 2017–18

Class: I B Tech

Branch-Section: IT-B

Semester: II

Subject: Computer Programming

Lectures per week: 4

Lecture Number	Topics to be covered	Date (s)
UNIT – I: Introduction to Computers		
1	Introduction to Computers – Computer Systems	18 December 2017
2	Computing Environments, Computer Languages	20 December 2017
3	Creating and running programs, Program Development	22 December 2017
4	algorithms and flowcharts	27 December 2017
5	Number systems-Binary, Decimal, Hexadecimal and Conversions	29 December 2017
6	Storing integers and real numbers	30 December 2017
7	Introduction to C Language – Background,	03 January 2018
8	C Programs, Identifiers, Types, Variables	05 January 2018
9	Input / Output, Operators (Arithmetic, relational, logical, bitwise etc.)	06 January 2018
10	Constants, Expressions, Precedence and Associativity	08 January 2018
11	Expression Evaluation, Type conversions,	10 January 2018
12	Statements- Selection Statements (making decisions) – if and switch statements	12 January 2018
13	Repetition statements (loops)-while, for, do-while statements, Loop examples, other statements related to looping – break, continue, goto, Simple C Program examples	13 January 2018
UNIT-II: Functions		
14	Functions-Designing Structured Programs, Functions, user defined functions	17 January 2018
15	inter function communication, Standard functions, Scope	19 January 2018
16	Storage classes-auto, register, static, extern, scope rules, type qualifiers	20 January 2018
17	recursion- recursive functions	22 January 2018
18	Limitations of recursion, example C programs.	22 January 2018
19	Arrays – Concepts using arrays in C,	24 January 2018
20	inter function communication, array applications-	27 January 2018
21	linear search, binary search	29 F 2018
22	bubble sort, two – dimensional arrays	31 February 2018
23	multidimensional arrays	02 February 2018
24	C program examples	03 February 2018
UNIT-III: Pointers		
25	Pointers – Introduction (Basic Concepts)	05 February 2018
26	Pointers for inter function communication,	10 February 2018
27	pointers to pointers, compatibility, Pointer Applications- Arrays and Pointers	12 February 2018
28	Pointer Arithmetic and arrays, Passing an array to a function	14 February 2018

29	memory allocation functions, array of pointers	16 February 2018
30	programming applications, pointers to void,	17 February 2018
31	pointers to functions.	19 February 2018
32	Strings – Concepts, C Strings	21 February 2018
33	String Input / Output functions, arrays of strings,	23 February 2018
34	string manipulation functions, string / data conversion, C program examples.	24 March 2018
UNIT-IV: Structure and Union		
35	Enumerated, Structure and Union Types – The Type Definition (typedef)	26 March 2018
36	Enumerated types, Structures –Declaration, initialization	28 March 2018
37	accessing structures, operations on structures	02 March 2018
38	Complex structures-Nested structures, structures containing arrays, structures containing pointers	03 March 2018
39	arrays of structures, structures and functions	05 March 2018
40	Passing structures through pointers, self-referential structures	07 March 2018
41	unions, bit fields, C programming examples	09 March 2018
42	command–line arguments, Preprocessor commands.	10 March 2018
UNIT-V: FILES		
43	Input and Output – Concept of a file	12 March 2018
44	streams, text files and binary files,	14 March 2018
45	Differences between text and binary files	16 March 2018
46	State of a file, Opening and Closing files	17 March 2018
47	file input / output functions (standard library input / output functions for files)	21 March 2018
48	file status functions (error handling)	23 March 2018
49	Positioning functions (fseek ,rewind and ftell)	28 March 2018
50	C program examples, File Related programs	31 March 2018

Text Books:

1. Computer Science: A Structured Programming Approach Using C, B. A. Forouzan and R. F. Gilberg, Third Edition, Cengage Learning.
2. Programming in C. P. Dey and M Ghosh , Second Edition, Oxford University Press.

Reference Books:

1. The C Programming Language, B.W. Kernighan and Dennis M. Ritchie, Second Edition, Pearson education.
2. Programming with C, B. Gottfried, 3rd edition, Schaum's outlines, McGraw Hill Education (India) Pvt Ltd.
3. C From Theory to Practice, G S. Tselikis and N D. Tselikas, CRC Press.
4. Basic computation and Programming with C, Subrata Saha and S. Mukherjee, Cambridge University Press.

Name and signature of the faculty: Y Prashanth ----

Name and signature of Head of the Department: M Vinod Kumar ---

