JAI HIND COLLEGE
BASANTSING INSTITUTE OF SCIENCE
&
J.T.LALVANI COLLEGE OF COMMERCE
(AUTONOMOUS)
"A" Road, Churchgate, Mumbai - 400 020, India.

Affiliated to
University of Mumbai

Syllabus for S.Y.BCom
Course : Computer Programming
Semester : III

Credit Based Semester & Grading System
With effect from Academic Year 2019-20

List of Courses

Course: Computer Programming Semester: III

Sr. No	Course Code	Course Title	Credits	Lectures /Week
SYBCOM				
1	CCP301	Computer Programming-I	3	3

Course Code: CCP301	Computer Programming-I	3 Credits
Learning Objectives	➢ **Develop a basic understanding of Architecture** ➢ **Solve basic numerical computation in binary/ other number representation systems** ➢ **Develop a program, style that is accepted industry practice**	
Course description	**The course aims to introduce students to understand basic computer architecture. Describe program language evolution and classification. To develop the algorithmic thinking skills required for structured problem solving.**	
		(45 lectures)
	THEORY	
Sub Unit	**Unit – I: HARDWARE**	**10 lectures**
1.	Evolution of Computers – Generations, Types of Computers, Computer System, Characteristics, Basic Components of a Digital Computer – Control Unit, ALU, Input / Output, Functions and Memory, Memory Addressing Capability of a CPU, Binary number system, Binary addition (1's complement, 2's Complement), Binary to decimal and Decimal to Binary Conversion, Octal Number, Hexadecimal System, World length of a computer, processing speed of a computer.	
Sub Unit	**Unit – II: SOFTWARE**	**10 lectures**
2.	Software and its Need, Types of Software – System Software, Application software, System Software – Operating System, Utility Program, Algorithms, Flow Charts – Symbols, Rules for making Flow chart, Programming languages, Assemblers, Compilers and Interpreter, Computer Applications in Business.	
Sub Unit	**Unit – III : INTRODUCTION TO C PROGRAMMING**	**13 lectures**
3.	Structure of C program, Keywords, identifies, constants, variables, data types, type modifier, type conversion, types of operator and expressions, Input and Output functions in C (print(), sancf(), getchar(), putchar(), gets(), puts()). Storage class specifiers Header files(stdio.h,math.j,conop.j)	
Sub Unit	**Unit – IV: C – DECISION / LOOP STATEMENTS**	**12 lectures**

4.	Decision Statement – if-else statement, break, continue, goto, switch () case and nested if statement. Loop control statements – for (), while (), do-while loop () and nested loops.	
5.	**LABORATORY TRAINING**	
	Lab 1: Writing algorithms and drawing flowcharts (Input-process-output). Lab 2: Writing algorithms and drawing flowcharts (Input-decision-process-output). Lab 3: Writing algorithms and drawing flowcharts (Simple Loops). Lab 4: Loading a C editor program-Entering and compiling a simple C-program. Lab 5: C-program to input name-and sales & then print name and commission. Lab 6: C-program to compute commission, discount etc using if() condition. Lab 7: Computing income tax based on given criterion. Lab 8: Printing numbers and summing number using loops. Lab 9 : Printing interest and depreciation tables.	
ICA **(Internal Continuous Assessment)**	CA 1 = 20 marks –Class Test CA 2 = 20 marks -Presentation Total CAs = 40 marks	
References:	1. Programming In C –Ashok Kamthane –Pearson Education 2. Programming in C –Ajay Mittal Pearson Education 3. C pocket reference By Peter Prinz, Ulla Kirch Prinz – O'Reilly 4. C programming Language –Brian w.Kernighan,Dennis M.Ritchie –Prenticehall 5. C The complete Reference Herbert Schildt – Osborne/McGraw Hill 6. Practical C Programming – Steve Oualline –O'Reilly	

Evaluation Scheme

[A] Evaluation scheme for Theory courses

I. Continuous Assessment (C.A.) - 40 Marks

    (i) C.A.-I :Test – 20 Marks of 40 mins. duration

    (ii) C.A.-II : Presentation – 20 Marks

II. Semester End Examination (SEE)- 60 Marks

Q.1 Answer any two -10 Marks
Q.2 Answer any two -10 Marks
Q.3 Answer any two -10 Marks
Q.4 Answer any two -10 Marks
Q.5 Answer any four -20 Marks