Kannada Sangha Pune's

Kaveri College of Arts, Science and Commerce, Pune

BBA(CA)

Name of the Course: Advance C Programming

Eligibility: **12th Pass with knowledge of Basics of C, Array, Structure, Pointer.**

Duration: **30 hours**

Fees: **will be announced before starting the course.**

Number of students: 80

Objectives of the Course:

1. To study advanced concepts of programming using the 'C' language.
2. To understand code organization with complex data types and structures.
3. To work with files

Syllabus:

Unit No.	Contents	Lectures
1	Union and Enumeration 1.1 Union 1.1.2. Def, Syntax. 1.2 Working with union 1.3 Initializing union 1.4 Advantages of union 1.3 Structures versus union 1.5 Advantages of union Enumeration 1.6 Enum keyword 1.7 typedef keyword 1.8 Working with Enum	3

2	File handling: 2.1 File 2.1.1 Def 2.1.2 File Opening Modes 2.1.3 Types of files - text and binary, 2.2 Functions: fopen(), fclose(), fgetc(), fputc(), fgets(), fputs(), fscanf(), fprintf(), getw(), putw(), fread(), fwrite(), fseek(),ftell() etc 2.3 File Management 2.3.1 Opening/Closing a File 2.3.2. Input/Output operations on Files 2.3.3. Error Handling During I/O Operations 2.3.4. Command Line Arguments 2.4. Random Access File	4
3	Graphics programming 3.1 Introduction of graphics 3.2 Graphical functions 3.3 Simple Programs	2
4	Hardware Interfacing with C 4.1.Introduction 4.1.1 The C Standard(s) 4.2. Embedded C Fundamentals 4.2.1.Fixed-Width Integers 4.2.2 Binary Data Manipulation 4.2.3.Fixed and Floating Point Math 4.2.4 Performance Improvement 4.2.5 Data Storage and Lifetimes 4.2.6 The World Before main()	6

	4.3. Peripheral Control 4.3.1. Peripheral Registers 4.3.2.Memory-Mapped I/O 4.3.3.Struct Overlays 4.3.4.Volatile Keyword 4.3.5. Bitmasks vs. Bitfields 4.3.6. Device Drivers 4.4. Interrupt Handling 4.4.1. Interrupt Service Routines 4.4.2.Vector Tables 4.4.3.Hardware Hurdles 4.4.4. Disabling Interrupts 4.4.5.Interrupt Latency	
	Practical Session	15

Course Outcomes:

1. Students acquire basic knowledge about computer system architecture, arithmetic and digital circuits.
2. Students will learn fundamental of Theoretical Computer Science.
3. Students get knowledge of computer assembly and operating system installation

Mrs. Sujata Bachhav
Course Coordinator, BBA(CA)

Principal