COMPUTER CONCEPT AND PROGRAMMING
BEG 174CO

Year-I **Semester-I**

Teaching Schedule Hours/week			Examination Scheme						Total Marks
			Final				Internal Assessment		
			Theory		Practical		Theory Marks	Practical Marks	
L	P	T	Duration	Marks	Duration	Marks			
3	3	1	3	80	-	-	20	25	125

Course Objective:

By the end of this course, students will be able to do
. Use and operate computers
. Enhance knowledge about computer system
. Work under different operating system
. Work with word processor and spreadsheets
. Develop simple code in C programming language

Course Content:

1.0 Computers and Introduction **(3 hrs)**
1.1 History of computer
1.2 Types of computer
1.3 Generation of computer
1.4 Uses: General purpose and specific
1.5 Comparison between man and computers

2.0 Computer System **(4 hrs)**
2.1 Input unit, CPU, output unit
2.2 CPU: primary storage, control unit
2.3 Memory characteristics: ROM, RAM, SRAM, DRAM, PROM, EPROM, EEPROM
2.4 Hard Disk, Keyboard and printer

3.0 Number Base **(4 hrs)**
3.1 Decimal system
3.2 Binary system
3.3 Octal system
3.4 Hexadecimal system
3.5 Conversion of one system to another
3.6 Bits, Nibbles, Bytes and Words

4.0 Operating System **(3 hrs)**
4.1 Definition of operating system
4.2 Function of operating system
4.3 Types of operating system

5.0 Computer Media **(3 hrs)**
5.1 Magnetic Tape
5.2 Floppy Disc
5.3 Hard Disk
5.4 Computer peripherals
5.5 Sound system

6.0 Software Application **(10 hrs)**
6.1 Word Processor
6.2 Spreadsheet
6.3 Database
6.4 Graphics
6.5 Engineering Application

7.0 Programming Language: C Programming **(6 hrs)**
7.1 Introduction and History of C programming Language
7.2 Different Steps in problem solving
7.3 Writing simple C programs

8.0 Writing programs in C **(12 hrs)**
8.1 Introduction to Function: Definition, types, Simple Programs
8.2 Introduction to Arrays: Definition, Types, Simple Programs
8.3 Classes of Structures and pointers

Total Number of Tutorials :(From ch3, ch6, ch7, ch8)

Laboratory Work: Several Laboratory classes will be conducted as devised by the concerned course instructor.

Reference:

- A Book on C, Al Kelly & Ira Pohl
- The programming Language, Brian Kernighan & Dennis Ritchie
- Introduction to Computer, Peter Norton
- Let us C, Yashwant Kanetkar
- C Programming, E. Balagurusamy
- Business Application of Computers, S.N. Adhikary & A.K. Shah