SEMESTER- I

COURSE CODE :- CC 1

COURSE TITLE :- COMPUTER ORGANISATION AND ARCHITECTURE

CREDIT :- 4

Marks distribution

Full Marks: 15 (MSE) + 60 (ESE) = 75 Duration: 3 hrs Pass Marks: 34

This paper consists of 60marksand divided into two groups:

Group-A: Objective questions (Compulsory)	:	1 x 10 = 10
Group-B: descriptive questions (5 out of 8 questions)	:	10 x 5 = 50

Total =		60

The questions must cover the entire syllabus with equal distribution of marks as far as practicable.

Module 1: Number System, Binary nos., Signed/Unsigned nos., 2's complement no's, Boolean algebra, De Morgan's Theorem,

Module 2: Simplification of Boolean Expressions, Karnaugh Map. Logic Gates, Truth Tables

Module 3: Combinational Logic Circuits & Realizations with Logic Gates- Half & Full Adders , Multiplexers, Demultiplexers, Encoders, Decoders.

Module 4: Sequential Circuits- JK, RS, T, D Flip Flop,

Module 5: Shift register, Synchronous and Asynchronous counters.

Module 6: Architecture of a simple Computer, Microprocessor, simple Architecture of 8085 & 8086, Registers and ALU, Instruction set,

Module 7: Addressing Modes, Timing diagram, Fetch, Decode and Execute Cycle, Interrupt, Mechanism, DMA, Introductionof RISCAnd CISC

Module 8: Memory and Memory Organization, ROM, EPROM, SRAM, DRAM & Auxiliary Memory.

Books Recommended:

1. Computer system Architecture – M. M. Mano
2. Digital electronics – B.Ram.

PRACTICAL: Ms. Office

(a) Slide making & presenting using MS-Power Point
(b) Editing, mail merging, macros using MS-Word
(c) Spreadsheets, worksheets application using MS-Excel