



**BBA (Information Technology Management)**

**BBA (ITM) Semester-I**

Course Code	UM01SEBBI03	Title of the Course	LOGICAL ORGANIZATION OF COMPUTER
Total Credits of the Course	2	Hours per Week	2

Course Objectives:	<ol style="list-style-type: none"> <li>1. To provide basic understanding of logical organization</li> <li>2. To impart fundamental knowledge on processors, memory, input/output, instructions and flow of control.</li> <li>3. To introduce fundamental concepts related to gates and logic circuits used in a digital computer.</li> </ol>
--------------------	--

Course Content		
Unit	Description	Weightage* (%)
1.	<b>Concepts of Number Systems and overview of Processors Functions</b> <ul style="list-style-type: none"> <li>– Number Systems (Binary, Octal, Hexadecimal, Decimal) and its Conversions, Arithmetic Operations (Addition only)</li> <li>– Number Representation (Integer) Signed &amp; Magnitude Method, 1's Complement Method, 2's Complement Method)</li> <li>– Number Representation (Floating Point) Single Precision Method &amp; Double Precision Method)(using IEEE only)</li> <li>– Character codes (ASCII, EBCDIC, UNICODE)</li> <li>– Error Detection and Correction Codes.</li> <li>– Instruction Execution Cycle</li> <li>– CPU organization (Data Path of typical Von Neumann Machine)</li> <li>– Parallel Instruction Execution</li> <li>– Parallel Machines, Array Processors, Pipeline Machines</li> </ul>	50
2.	<b>Logic Gates, Boolean Algebra and Overview of Computer hardware</b> <ul style="list-style-type: none"> <li>– GATES (AND, OR, NOT, NAND, NOR, XOR, XNOR, Bubbled AND, Bubbled OR)</li> <li>– De Morgan's Theorems</li> <li>– Boolean Algebra, Truth Tables</li> <li>– Memory (Primary, Secondary) (RAM, ROM)</li> <li>– Hard Disk, Floppy Disk, CDROM</li> <li>– Printers (Laser, Inkjet, Dot Matrix)</li> <li>– VDU, Mouse, Keyboard</li> <li>– Scanners</li> </ul>	50

Teaching-Learning Methodology	Blended learning approach incorporating traditional classroom teaching and online/ICT-based teaching practices.
-------------------------------	---





Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand various number systems, conversion, arithmetic operations of a Computer System
2.	Understand about processors, memory, I/O devices, Instructions executions
3.	Understanding about basic gates and logic circuits used in a digital computer.

Suggested References:	
Sr. No.	References
1.	V. Rajaraman : Fundamentals of Computers, Prentice Hall Of India Pvt. Ltd.
2.	Tanenbauma S. Structured Computer Organization, Prentice Hall Of India Pvt. Ltd.
3.	Malvino A. P.: Digital Computer Electronics, Tata McGraw Hill Publication Co. Ltd.

\*\*\*\*\*

