

SARDAR PATEL UNIVERSITY
Programme & Subject: BBA (Information Technology Management)
(3 Years)
Semester: I
Syllabus with effect from: June - 2015

Paper Code: UM01EBBI05	Total Credit: 3
Title Of Paper: Computer Organisation	

Unit	Description in Detail	Weightage (%)
I	Number System and its Arithmetic Introduction to Number Systems - Conversions: Decimal, Binary, Octal, Hexadecimal - Binary Arithmetic - Character codes - ASCII, EBCDIC, UNICODE - Representation of Numbers: (Integer)- Signed magnitude method, 1's complement method, 2's complement method, Excess Notation method - Representation of Float Numbers: Single precision, Double precision method - Error Detection and Correction Code: Parity bit method, Hamming code	25%
II	Gates and Boolean algebra Gates - AND Gate, OR Gate, NOT Gate, NAND Gate, NOR Gate, XOR Gate, XNOR Gate, Bubbled AND Gate, Bubbled OR Gate - Boolean algebra - Truth Tables - De Morgan's Theorems	25%
III	Processor Functions and Components Instruction Execution Cycle - CPU Organization: Data path of a typical VON- Neumann machine - Functioning of a processor of hypothetical computer - Parallel Instruction Execution - Categories of Parallel Machines, Array Processors, Multifunctional Units, Pipeline Machines, Multiprocessors - Direct Addressing, Indirect Addressing, Register Addressing, Stack Addressing	25%
IV	Overview of I/O and Memory Devices Overview of I/O devices: Hard Disk, Floppy Disk, CD-ROM (Introduction, Advantages and Disadvantages) - Introduction to RAM, ROM, PROM, EEPROM - Printers (Line, Dot Matrix, Inkjet, Laser) – VDU – Mouse – Keyboard – Scanners – Plotters - OCR (MICR, Barcode Reader)	25%

Basic Text & Reference Books:-

- Tanenbaum A S: Structured Computer Organization Prentice-Hall of India Pvt. Ltd.
- Malvino Brown: Digital Computer Electronics, 3rd Edition
- Malvino and Leach: Digital Principles and Applications, 4th Edition.
- Rajaraman V: Computer Fundamentals Prentice – Hall of India Pvt. Ltd.
- Sinha P K: Computer Fundamentals BPB Publi, (Second Edition)
- S.K.Basandra: Computers Today Galgotia Publi.
- Peter Norton: Introduction to Computers TMH.

