

SARDAR PATEL UNIVERSITY
Programme: BBA(Information Technology Management)
Semester: I
Syllabus with effect from: JUNE 2011

Paper Code:UM01CBBI03	Total Credit: 3
Title Of Paper: Computer Organisation	

Unit	Description in detail	Weighting (%)
I	Number System: Introduction To Number System, Binary Octal, Decimal,Hexadecimal, Conversions: Binary,Octal,Hexadecimal,Binary,Arithmetic:Addition,Subtraction,Character Codes – Ascii, Ebcdic,Bcd, Representation Of Numbers: (Integer)- Signed Magnitude Method, 1's Complement Method, 2's Complement Method, Excess Notation Method, Representation Of Numbers : (Float)- Single Precision, Double Precision Method,Error Detection And Correction Code: Parity Bit Method,Hamming Code.	25 %
II	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, Immediate Addressing, Direct Addressing, Indirect Addressing, Register Addressing, Stack Addressing, Indexing.	25 %
III	Overview Of I/O And Memory Devices: Overview Of I/O Devices:Hard Disk, Floppy Disk, Cd-Rom (Introduction, Advantages,Disadvantages), Introduction To Ram, Rom, Prom, Eeprom, Printers (Line, Dot Matrix, Inkjet, Laser), Vdu, Mouse, Keyboard, Scanners, Plotters, Ocr (Micr, Barcode Reader)	25 %
IV	Sap –I Architecture Sap-I Architecture, Instruction Set: Lda, Add, Sub, Out, Hlt, Programming Sap-I, Fetch Cycle, Execution Cycle, Machine And Instruction Cycle, Sap-I Micro Programme, Microprogramming.	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 : Computer Today Galgotia Publi.
- Peter Norton: Introduction to Computers TMH

