

SARDAR PATEL UNIVERSITY,
BBA-(ISM) PROGRAMME
Semester-I
(Effective from June 2018)

Paper Code: UM01CBBS22	Total Credit:3 Marks : 100
Title Of Paper: Logical Organization of Computer	
Objectives: Students come to know about the binary (Machine) Language of computer.	

Unit	• Description in detail	Weighting (%)
1	Introduction Block diagram of a simple computer and its different functional units. Representation of information. <ul style="list-style-type: none"> • Introduction to number system(B,O,H,D) ,conversions(B,O,H,D) • Arithmetic (add, sub B), radix 1, complement, radix complement method. • Character codes, (ACSII ,EBCDIC) Representation of numbers <ul style="list-style-type: none"> • Signed magnitude, 1's complement, 2's complement, excess notations Error detection and correction codes 	25 %
2	Gates And Boolean algebra Logical gates AND,OR,NOT,NAND,NOR,X-OR Truth table and simplification. Boolean algebra, De-Morgan's theorems. Reduction of Boolean algebra. Karnaugh Map up to 3 variables. Karnaugh Map simplification.	25 %
3	Microcomputer And Structure Of CPU Introduction to Microcomputer. Processor Functions And Components, Instruction Execution Cycle CPU organization <ul style="list-style-type: none"> • The data path of a typical von-neuman machine parallel • Instruction execution: categories of parallel machines, Array processors, Multifunctional units, pipeline machines, multiprocessors. 	25 %
4	Input Output Devices Memory Systems Of microcomputers ROM, RAM, PROM, EROM, Static And Dynamic RAM Floppy disk, Hard Disc,CD ROM Overview of input output devices Keyboard, Mouse, OCR, Scanner, Plotters, Printers, Graphics Display Devices	25 %

Evolution: Internal: 40 Marks (Theory)

External: 60 Marks (Theory) –Two –Hour Examination.

Basic Text & Reference Books

Introduction to computer by Peter Norton.

Computer Fundamentals by P.K Sinha.

Computer Fundamentals by V. Rajaraman.

Structure computer organization by A S Tanenbaum