



SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))
Syllabus with effect from the Academic Year 2021-2022

Bachelor of Business Administration(Information System Management)
(BBA ISM Ist Sem)

Course Code	UM01CBBS72	Title of the Course	Logical Organization of Computer
Total Credits of the Course	03	Hours per Week	03 Hours

Course Objectives:	Students come to know about: <ul style="list-style-type: none">➤ Block Diagram, Basic needs to operate computer.➤ The binary (Machine) Language of computer.➤ To get Logical Circuit working Process.
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Course Content		
Unit	Description	Weight age* (%)
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.• Signed magnitude, 1's complement, 2's complement, excess notations• Error detection and correction codes.	25 %
2.	GATES AND BOOLEAN ALGEBRA <ul style="list-style-type: none">• 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 %



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4.	INPUT OUTPUT DEVICES <ul style="list-style-type: none">• 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 %
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Teaching-Learning Methodology	<ul style="list-style-type: none">➤ White Board➤ Presentation➤ Video➤ Case Study
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weight age
1.	Internal Written 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.	Students gain Knowledge on Basic fundament of Computer
2.	Students get how Computer accept data and format
3.	Students get knowledge how computer read the data in Machine Language
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Suggested References:	
Sr. No.	References



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1.	Introduction to computer by Peter Norton
2.	Computer Fundamentals by P.K Sinha.
3.	Computer Fundamentals by V. Rajaraman.
4.	Structure computer organization by A S Tanenbaum

On-line resources to be used if available as reference material

On-line Resources

1. https://www.academia.edu/33601473/computer_fundamentals_by_sinha_and_sinha_pdf

2. <http://pdplab.it.uom.gr/teaching/tanenbaum/2.pdf>
