



Bachelor of Business Administration  
BBA (ISM) - Semester-I

<b>Course Code</b>		<b>Title of the Course</b>	<b>Logical Organization of Computer</b>
<b>Total Credits of the Course</b>	<b>2</b>	<b>Hours per Week</b>	<b>2</b>

<b>Course Objectives:</b>	<ol style="list-style-type: none"><li>1. To study the Computer Number System.</li><li>2. To study the Digital Circuits.</li><li>3. To learn the concept of decoder, encoder, multiplexer and demultiplexer.</li><li>4. To learn the concept of flip-flops, register and counters.</li></ol>
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<b>Course Content</b>		
<b>Unit</b>	<b>Description</b>	<b>Weightage* (%)</b>
1.	<b>Introduction to Digital Number Systems</b> Block diagram of a simple computer and its different functional units. Representation of information. Number System: Binary, Octal, Decimal & Hexadecimal and their inter-conversions - Character Representation - Data Representation: positive, negative, maximum and minimum number representation (related to 8-bit number) - Real number representation - Binary arithmetic: Binary Addition, binary subtraction using 1's and 2's compliment – Character codes (ASCII, EBCDIC, UNICODE)	50%
2.	<b>INPUT /OUTPUT and STORAGE DEVICES</b> Memory Systems of microcomputers ROM, RAM, PROM, EROM, Static and Dynamic RAM., Floppy disk, Hard Disc, CD ROM, PENDRIVE, SSD, Overview of input output devices. Keyboard, Mouse, OCR, Scanner, Plotters, Printers, Graphics Display Devices.	50%

<b>Teaching-Learning Methodology</b>	Information and Communication Technology (ICT) in education is the mode of education that use information and communications technology to support, enhance, and optimize the delivery of information.
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<b>Evaluation Pattern</b>		
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<b>Sr. No.</b>	<b>Details of the Evaluation</b>	<b>Weightage</b>
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**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.11))**  
**Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024**

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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.	Understanding of fundamental concepts related to Number systems.
2.	Ability to describe the functioning of Digital Computer.
3.	Knowledge of logical circuit mechanism.



**Suggested References:**

Sr.No.	References
1.	Tanenbaum A S: Structured Computer Organization Prentice-Hall of India Pvt. Ltd.
2.	Malvino Brown: Digital Computer Electronics, 3rd Edition
3..	Malvino and Leach: Digital Principles and Applications, 4th Edition. McGraw Hill Education
4.	Rajaraman V: Computer Fundamentals Prentice – Hall of India Pvt. Ltd.
5.	Sinha P K: Computer Fundamentals BPB Publi, (Second Edition)
6.	S.K. Basandra: Computers Today Galgotia Publi.
7.	Peter Norton: Introduction to Computers TMH.
8.	William H. Gothmann: Digital Electronics – An Introduction to Theory and Practice, 2nd Edition, PHI, 1982
On-line resources to be used if available as reference material	
On-line Resources	
1. <a href="https://www.academia.edu/40474484/Digital_Computer_Electronics_Albert_Paul_Malvino">https://www.academia.edu/40474484/Digital_Computer_Electronics_Albert_Paul_Malvino</a>	
2. <a href="https://www.javatpoint.com/digital-electronics">https://www.javatpoint.com/digital-electronics</a>	

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