

**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**

Bachelor of Business Administration  
BBA (ITM) - Semester-II

Course Code	UM02VABBI05	Title of the Course	Digital Computer Electronics
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Course Objectives:	1. To study the Basic Digital Logic Circuit. 2. To study the fundamentals of Karnaugh Map.
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Total Credits of the Course	2	Hours per Week	2
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Course Content		
Unit	Description	Weightage* (%)
1.	<b>Basic Digital Logic Circuit-I</b> Seven Segment Decoder Multiplexer ( 4 X 1, 8 X 1, 16 X 1 line) Nibble Multiplexer De-Multiplexer (1 X 4, 1 X 8, 1 X 16 line) Comparator	50%
2.	<b>Karnaugh Map</b> Boolean Relations Sum of Product Method Karnaugh Map up to 4 variables Karnaugh Map Simplifications Don't Care Conditions	50%

Teaching-Learning Methodology	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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Evaluation Pattern
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Sr. No.	Details of the Evaluation	Weightage
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
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1.	Understanding of fundamental concepts of digital logic circuits.
2.	Ability to describe the functioning of Digital Computer.
3.	Knowledge of logical circuit mechanism.

Suggested References:
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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
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On-line Resources
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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>
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2. <a href="https://www.javatpoint.com/digital-electronics">https://www.javatpoint.com/digital-electronics</a>
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