SES's L. S. RAHEJA COLLEGE OF ARTS AND COMMERCE

(AUTONOMOUS)

Syllabus of Microprocessor & Microcontroller Architecture LAB under NEP 2020 vertical - VSC with effect from 2024-25

Department of Information Technology and Data Science

HoD/Sr. Person of the Department: Prajakta Joshi

Date of approval by the BoS: 27/04/4024

Approved by the Academic Council: 29/04/2024

Ratified by the Governing Body on: 06/05/2024

Programme: B.Sc.(IT)				Semester : II	
Course : Microprocessor & Microcontroller Architecture LAB Academic Year: 2024-2025 Batch: 2024-2027				Code: UGBSCITIIVSC224	
Teaching Scheme			Evaluation Scheme		
Lectures	Practical	Tutorials	Credits	Internal Continuous Assessment (ICA) (weightage)	Term End Examinations (TEE) (weightage)
Nil	30	Nil	1	-	25

Learning Objectives :	1. Operations related to single & Multiple memory locations 2. Simple assembly language programs 3. How to perform register operations, packing and unpacking 4. Embedding computer using 8051 microcontrollers 5. Interfacing I/O Ports
Learning Outcomes :	1. Apply concepts of 8085 to single & Multiple Memory Locations 2. Apply concepts of micro-processor register operations 3. Can implement assembly language programs 4. Learns to simulate and configure different timer controls
Pedagogy:	Experiential learning, logic building, practical implementation, hardware kits 8085 and 8051

Detailed Syllabus: (per session plan)

Session Outline For: Microprocessor & Microcontroller Architecture LAB

Each lecture session would be of one hour duration (30 sessions).

Practical	Content	Practical Wise Pedagogy Used	Practical Wise Duration
I	Perform the store and exchange operations related to given memory locations.	practical implementation with hardware kits 8085 and 8051	6
II	Simple assembly language programs for 8 and 16-bit data addition, subtraction, 1's and 2's complement operation	practical implementation with hardware kits 8085 and 8051	6
III	Preform operations on 8 and 16-bit data with Multiple memory locations.	practical implementation with hardware kits 8085 and 8051	6
IV	Perform register operations.	practical implementation with hardware kits 8085 and 8051	6
V	Programming 8051 microcontroller with Embedded C	practical implementation with hardware kits 8085 and 8051	6