SHREE SWAMI ATMANAND SARASWATI INSTITUTE OF TECHNOLOGY

COMPUTER ENGINEERING DEPARTMENT

Laboratory Plan

Faculty Name: Prof. Vidhi Patel & Prof. Priyanka Desai
Subject Name & Code: COMPUTER ORGANIZATION &ARCHITECTURE (3140707)
Term Duration: 6-3-2023 to 24-6-2023
Academic Year: Feb-2023.

Sr. No.	List of Experiment	Date	Page No.	Signature
1.	Write the working of 8085 simulator GNUsim8085 and basic architecture of 8085 along with small introduction.			
2.	Design of AND,OR,XOR,Complement and Addition circuit Subtraction circuit, shifter circuit.			
3.	Design of ALU (Arithmetic logic Unit).			
4.	Design Common Bus System for 4 registers.			
5.	Write down program for addition & subtraction of 8-bit & 16-bit numbers.			
6.	Write down program to multiply & divide two 8-bit numbers.			
7.	Write an assembly language code in GNUsim8085 to store numbers in reverse order in memory location.			
8.	Write an assembly language code in GNUsim8085 to implement arithmetic instruction.			
9.	Write an assembly language code in GNUsim8085 to find the factorial of a number.			
10.	Write an assembly language code in GNUsim8085 to implement logical instructions.			
11.	Implement Booth's Algorithm.			
12.	Implement 16-bit single-cycle MIPS processor in Verilog HDL.			

Prof. Priyanka Desai
Prof. Vidhi Patel
Subject Faculty

Prof. Chirag Patel
Head of Department