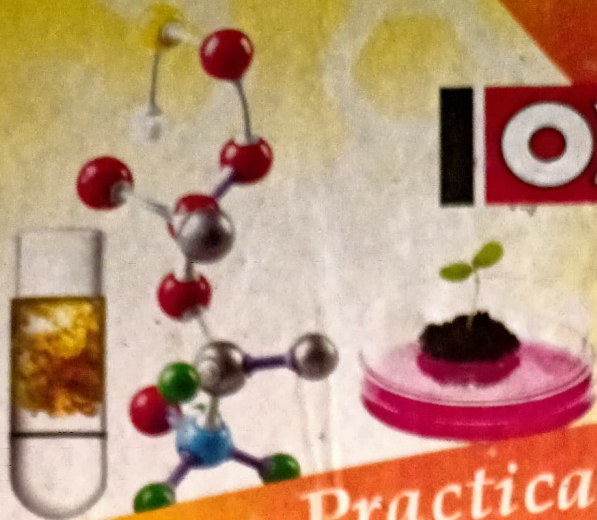
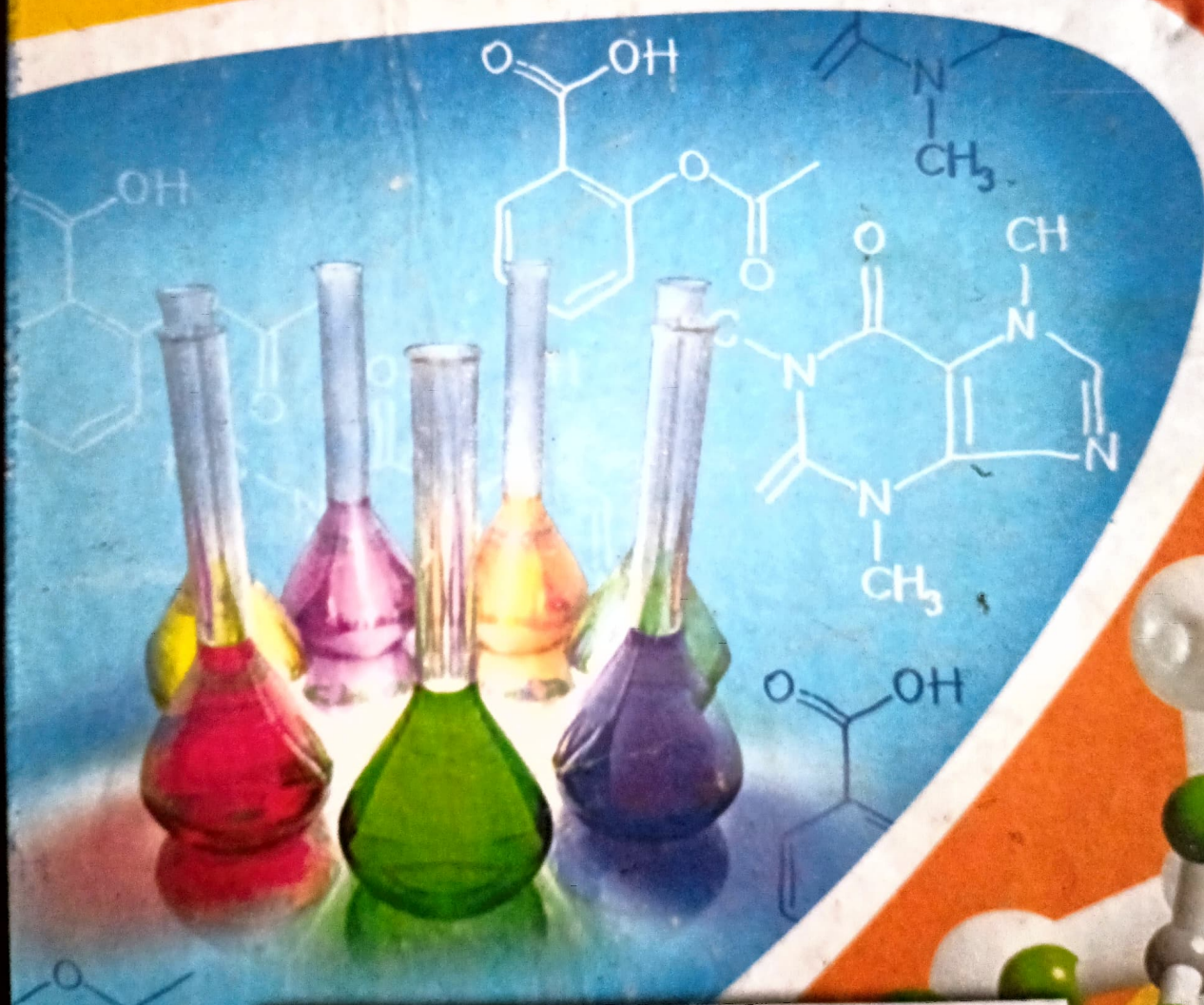


**OXFORD**



*Practical Note Book*




Name *Medhatithi Paul*


Class ..... Roll. *29*... Year *20 23*....





**SILIGURI INSTITUTE OF TECHNOLOGY**  
Department of Electronics & Communication Engineering


Name of the Paper: <i>Microprocessor &amp; Microcontrollers Lab</i>	Paper code: <i>EC 493</i>
Name of the student: <i>Medhatithi Paul</i>	Branch: <i>ECE</i> Roll no: <i>11900320029</i>


Experiment Name/No.	Objective/Criteria	Quality/Score (total evaluation marks = 100)				Marks	Total marks	Signature of teacher with date
<b>Experiment no: 1</b>  <i>P- 1, 2, 3</i>	Theoretical concept (25)	Excellent(25-20)	Good(19-14)	Fair(13-7)	Poor(6-0)	<i>20</i>	<i>85</i>	
	Experiment conduct(25)	Excellent(25-20)	Good(19-14)	Fair(13-6)	Poor(5-0)	<i>20</i>		
	Team work(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
	Lab report(20)	Excellent(20-15)	Good(14-10)	Fair(9-6)	Poor(5-0)	<i>15</i>		
	Experimental setup & safety (10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
<b>Date: 16/3/23</b>	Discipline(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		

<b>Experiment no: 2</b>  <i>P- 1, 2, 3</i>	Theoretical concept (25)	Excellent(25-20)	Good(19-14)	Fair(13-7)	Poor(6-0)	<i>22</i>	<i>87</i>	
	Experiment conduct(25)	Excellent(25-20)	Good(19-14)	Fair(13-6)	Poor(5-0)	<i>20</i>		
	Team work(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
	Lab report(20)	Excellent(20-15)	Good(14-10)	Fair(9-6)	Poor(5-0)	<i>15</i>		
	Experimental setup & safety (10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
<b>Date: 12/4/23</b>	Discipline(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		

<b>Experiment no: 3</b>  <i>P- 1, 2, 3, 4</i>	Theoretical concept (25)	Excellent(25-20)	Good(19-14)	Fair(13-7)	Poor(6-0)	<i>22</i>	<i>87</i>	
	Experiment conduct(25)	Excellent(25-20)	Good(19-14)	Fair(13-6)	Poor(5-0)	<i>20</i>		
	Team work(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
	Lab report(20)	Excellent(20-15)	Good(14-10)	Fair(9-6)	Poor(5-0)	<i>15</i>		
	Experimental setup & safety (10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
<b>Date: 13/4/23</b>	Discipline(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		

<b>Experiment no: 4</b>  <i>P- 1, 2, 3, 4</i>	Theoretical concept (25)	Excellent(25-20)	Good(19-14)	Fair(13-7)	Poor(6-0)	<i>25</i>	<i>90</i>	
	Experiment conduct(25)	Excellent(25-20)	Good(19-14)	Fair(13-6)	Poor(5-0)	<i>20</i>		
	Team work(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
	Lab report(20)	Excellent(20-15)	Good(14-10)	Fair(9-6)	Poor(5-0)	<i>15</i>		
	Experimental setup & safety (10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
<b>Date: 19/3/23</b>	Discipline(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		

<b>Experiment no: 5</b>  <i>P- 1, 2, 3, 4, 5, 6</i>	Theoretical concept (25)	Excellent(25-20)	Good(19-14)	Fair(13-7)	Poor(6-0)	<i>24</i>	<i>92</i>	
	Experiment conduct(25)	Excellent(25-20)	Good(19-14)	Fair(13-6)	Poor(5-0)	<i>22</i>		
	Team work(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
	Lab report(20)	Excellent(20-15)	Good(14-10)	Fair(9-6)	Poor(5-0)	<i>15</i>		
	Experimental setup & safety (10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
<b>Date: 4/4/23</b>	Discipline(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		

<b>Experiment no: 6</b>  <i>P- 1, 2, 3</i>	Theoretical concept (25)	Excellent(25-20)	Good(19-14)	Fair(13-7)	Poor(6-0)	<i>25</i>	<i>94</i>	
	Experiment conduct(25)	Excellent(25-20)	Good(19-14)	Fair(13-6)	Poor(5-0)	<i>22</i>		
	Team work(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
	Lab report(20)	Excellent(20-15)	Good(14-10)	Fair(9-6)	Poor(5-0)	<i>17</i>		
	Experimental setup & safety (10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		
<b>Date: 25/5/23</b>	Discipline(10)	Excellent(10-8)	Good(7-6)	Fair(5-4)	Poor(3-0)	<i>10</i>		

# Experiment - 1

## PROBLEM STATEMENT :

1) Write a program to add two 8 bit data.

Address	Mnemonics	Hex Code	Comments
8000	MVI B, (02) <sub>H</sub>	06	(Move Immediate) Load 8 bit data into B register.
8001		02	
8002	MVI A, (08) <sub>H</sub>	3E	(Move Immediate) Load 8 bit data to accumulator.
8003		08	
8004	ADD B	80	Add data in B to the data present in A.
8005	RST 3	DF	Restart

## Output :

The output of the program executed is (0A)<sub>H</sub>



2) Write a program to subtract two 8 bit data.

Address	Mnemonics	Hex Code	Comments
8000	MVI B, (02) <sub>H</sub>	06	Load 8 bit data into B register.
8001		02	
8002	MVI A, (08) <sub>H</sub>	3E	Load 8 bit data into accumulator A
8003		08	
8004	SUB B	90	Subtract data in B from data in A.
8005	RST 3	DF	Restart.

• Output :

The output of the program executed is (06)<sub>H</sub>

37. Store one data in 9000 memory location and another data in register E. Add the data and store the output in 9004 memory location.

Address	Mnemonics	Hex Code	Comments
8100	LXI H, (9000) <sub>H</sub>	21	Load 16 bit <sup>data in</sup> memory location into register pair HL
8101	MVI E, (09) <sub>H</sub>	1E	Load 8 bit data into register E.
8102		09	
8103	MOV A, E	7B	Move data from E to accumulator A
8104	ADD M	86	Add data present in memory to A's data
8105	LXI H, (9004) <sub>H</sub>	21	Point memory location of HL (M), i.e., 9004 location.
8106	MOV M, A	77	Move data from A to M
8107	RST 3	DF	Restart.

Input : (09)<sub>H</sub> stored in E & (02)<sub>H</sub> stored at (9000)<sub>H</sub> before execution.

Output : The output is (0B)<sub>H</sub> and ~~(09)~~ <sup>12/12/23</sup> stored in (9004)<sub>H</sub>