



# ARSD College, University of Delhi

## Model Course Handout/Lesson Plan

Course Name : B.Sc. (Physics Sc. Computer Science) Lab						
Semester	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Credit (C)
IV	42344403	Computer System Architecture	4		4	6
Teacher/Instructor(s)		Jag Mohan				
Session		July-Dec 2022				

Course Description:

List of Experiments:

Details of the Lab Course		
Session	Name of Experiment	Contact Hours
1	Write a program to convert a number in Radix 'R' to radix 10 and vice versa. Test the same by a. Converting an unsigned number from binary, octal, hex to decimal. b. Converting an unsigned number from decimal to binary, octal, hex.	12
2	Write a program that will prompt for the input of two integer values. Then using the bitwise shift operators show the result of a. Left shifting the first number by the second b. Right shifting the first number by the second c. Exclusive OR of the first number by the second bitwise d. OR of the first number by the second bitwise e. AND of the first number by the second bitwise	12
3	Write a program that will prompt for the input of a binary value and print: a. One's complement b. Two's complement	12
4	Write a program to print the values of a 5 bit binary up-down counter. User should be able to specify the up or down nature of the counter.	12
5	Write a program to implement the following binary operations: a. Addition b. Subtraction using 2's complement	12
6		
7		

8		
9		
10		
11		
12		
	Total	60
Suggested Books:		
Sl. No.	Name of Authors/Books/Publishers	Year of Publication/Reprint
1	Mano, M. (1992). Computer System Architecture (3rd Edition). Pearson Education	1992
2	Mano, M. (2013). Digital Design. New Jersey: Pearson Education Asia.	2013
3	Null, L., & Lobur, J. (2014). The essentials of computer organization and architecture. Jones & Bartlett Publishers.	2014
4.		
5.		

Evaluation Scheme:

No.	Component	Duration	Marks
1.	Internal Assessment		25
	• Quiz/Viva		
	• Observation & Record		
	• Attendance		
	• Model Exam		
2.	End Semester Examination	3 hr	75