

Lesson Plan

Name of the Faculty : DR. RASHMI DAHRA (PROFESSOR)

Discipline : BCA

Semester : 2ND

Subject : DIGITAL CIRCUIT & LOGIC DESIGN (BCA-102B)

Lesson Plan Duration : 15 weeks (from January, 2018 to April, 2018)

Work Load (Lecture/Practical) per week (in hours):Lecture: 3, Practical: Nil

Week	Theory		Practical	
	Lecture Day	Topic(including Assignment/Test)	Practical Day	Topic
1st	1 st	Number Systems	1 st	
	2 nd	Number Systems	2 nd	
	3 rd	Number Systems		
	T1	Tutorial---review of lectures		
2nd	4 th	Binary Arithmetic	3 rd	
	5 th	Binary Arithmetic	4 th	
	6 th	Assignment on above topics/ Test 1		
	T2	Tutorial---problem/review of lectures		
3rd	7 th	Fixed-point and Floating point representation of numbers	5 th	
	8 th	BCD Codes	6 th	
	9 th	Error detecting and correcting codes		
	T3	Tutorial---problem/ review of lectures		
4th	10 th	Character Representation –ASCII, EBCDIC, Unicode	7 th	
	11 th	Binary Logic: Boolean Algebra	8 th	
	12 th	Assignment on above topics/ Test 2		
	T4	Tutorial---problem/review of lectures		
5th	13 th	Boolean Theorems	9 th	
	14 th	Boolean Functions and	10 th	

		Truth Tables		
	15 th	Canonical and Standard forms of Boolean functions		
	T5	Tutorial---problem/review of lectures		
6th	16 th	Simplification of Boolean Functions Venn diagram, Karnaugh Maps	11 th	
	17 th	Karnaugh Maps	12 th	
	18 th	Assignment on above topics/ Test 3		
7th	19 th	Digital Logic: Basic Gates –AND, OR, NOT	13 th	
	20 th	Universal Gates –NAND, NOR, Other Gates XOR, XNOR	14 th	
	21 st	NAND, NOR implementation		
	T6	Tutorial---problem/review of lectures		
8th	22 nd	Combinational Logic – Characteristics, Design	15 th	
	23 rd	Analysis procedures, Multilevel NAND and NOR circuits	16 th	
	24 th	Assignment on above topics/ Test 4		
	T7	Tutorial---problem/review of lectures		
9th	25 th	Combinational Circuits: Half-Adder	17 th	
	26 th	Full-Adder and binary adder	18 th	
	27 th	Half-Subtractor		
	T8	Tutorial---problem/review of lectures		
10th	28 th	Full-Subtractor	19 th	
	29 th	Decoders	20 th	
	30 th	Assignment on above topics/ Test5		
	T9	Tutorial---problem/review of lectures		
11th	31 st	Cascading of decoders	21 st	
	32 nd	BCD Decoder & Encoders	22 nd	
	33 rd	Multiplexers		

	T10	Tutorial---problem/review of lectures		
12th	34 th	Cascading of multiplexer	23 rd	
	35 th	De_multiplexers	24 th	
	36 th	Comparators		
	T11	Tutorial---problem/review of lectures		
13th	37 th	Code Converters	25 th	
	38 th	Code Converters	26 th	
	39 th	Assignment on above topics/ Test6		
	T12	Tutorial---problem/ review of lectures		
14th	40 th	Code Converters	27 th	
	41 st	BCD to Seven Segment Decoder	28 th	
	42 nd	BCD to Seven Segment Decoder		
15th	43 rd	Problem session	29 th	
	44 th	Problem session	30 th	
	45 th	Problem session		

IMPORTANT DATES (KEY DATES)

* 14 to 16 February, 2018 (Wednesday -Friday)----- SESSIONAL I

* 4 - 6 April, 2018 (Wednesday - Friday) ----- SESSIONAL II

*27 April, 2018 (Friday) ----- LAST DAY OF SESSION

*1 May to 8 May, 2018 (Tuesday-Tuesday)----- PRACTICAL EXAMINATION

Start of End semester examinations (Even Semester)-----11 May, 2018 (Friday) to 10 June, 2018 (Sunday)

(DR. RASHMI DAHRA)

PROFESSOR