cet				
NEERS	Credit Based Grading Scheme(Revised - CBGS-2012	2012) - Univers (R)	INOLOGY (I sity of Mumbai	Fatel 200
TCET/	FRM/IP-02/10	Dian		Revisior
	Semester Practical / Tutorials)	Plan Assignment	t)	
Semest	er: III Course: IT		Batches: S.E	(B4)
Subject	: Digital design Lab Class: SE –	т	Batch size: 20	Students
Laborat	ory faculty in charge: Mr.Yele V.P.	Attendent)		
Lab. As		Attendant)		
	xperiment planned as per University Curric	uium		
Basic	Experiments:			
Sr. No.	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Planned Date	Completio n Date	Remarks
		24/7/17		
1	and universal gates)			
		31/7/17		
2	Realization of Boolean algebra using gates			
		7/8/17		
3	Verify the operation of 4- bit magnitude comparator			
4	Implementation of Multiplexer and De- Multiplexer using Gates	14/8/17		
5	Implementation of Encoder and Decoder using Gates	14/8/17		
Desig	n/ Development Experiments:			
6	Design of Full Adder and Full Subtractor	4/9/17		
7	To verify and observe the operation of SR and JK flip-flops	11/9/17		

8 To design and verify Left and Right shift registers 11/9/17 Implementation of Logic Gates using VHDL 18/9/17 9 Implementation of Logic Gates using VHDL 18/9/17 Implementation of Logic Gates using VHDL 18/9/17 10 Case Study on: Case Study on: Student choice in the following areas: (30 Hrs / Semester / Student). (Total 120 Hrs) The areas are: 1. Research 25/9/17 11 In Research 2. Core 3. Multidisciplinary 4. Application S.No Project Title/Group Size Class Sroup Size/ Project Hours Project Type Referent corn/logi 1 Simple Logic Gate Processor SE 4-5 Mini http://cir corn/logi 2 Learn to Make NAND Gate SE 4-5 Mini www. elst locate/csi 3 Literature survey loT for Environment management SE 4-5 Mini www. elst locate/csi 4 Literature Survey loT for Environment management SE 4-5 Mini www. elst locate/csi	F INFORMATION TECHNOLOGY (IT) g Scheme(Revised - 2012) - University of Mumbai CBGS-2012(R)	DRMATIO e(Revised - 20 GS-2012(R)	OF INFO ing Scheme CB	RTMENT (edit Based Grad	DEPA Cre		
9 Implementation of Logic Gates using VHDL 18/9/17 9 Implementation of Logic Gates using VHDL 18/9/17 10 Case Study on Evaluating and observing Boolean expression using PALs and PLAs 18/9/17 11 Project: 18/9/17 11 1. To design automated system for washing machine 25/9/17 2. To design control system for lift 25/9/17 Thir Minor Projects Objective: To get hands on experience to execute projects with respect student choice in the following areas. (30 Hrs / Semester / Student). (Total 120 Hrs) The areas are: 1. Research 2. Core 3. Multidisciplinary 4. Application S.No Project Title/Group Size Class Group Size/ Project Type Referen Hours 1 Simple Logic Gate Processor SE 4-5 Mini http://cir com/log 2 Learn to Make NAND Gate SE 4-5 Mini http://cir com/log 3 Literature survey on IoT for Agriculture SE 4-5 Mini www.elsc 4 Literature survey IoT for Envirnoment management SE 4-5 Mini www.elsc No. Planned Completed No. of Planned<	Ind Right shift 11/9/17	t shift 1	To design and verify Left and Right shift registers				
Group Learning Activity: 10 Case Study on: Case study on Evaluating and observing Boolean expression using PALs and PLAs 18/9/17 11 Project: 1. To design automated system for washing machine 2. To design control system for lift 25/9/17 11 1. To design automated system for washing machine 2. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 12 Research 2. Core 3. Multidisciplinary 4. Application 3 Project Title/Group Size Class Group Size/ Project Hours Project Type Referen thours 1 Simple Logic Gate Processor SE 4-5 Mini http://cir com/logi 2 Learn to Make NAND Gate SE 4-5 Mini http://cir com/logi 3 Literature survey loT for Envirnoment management SE 4-5 Mini www.elsk locate/csi 4 Li	ates using VHDL 18/9/17	ng VHDL 1	Implementation of Logic Gates using VHDL				
10 Case Study on: Case study on Evaluating and observing Boolean expression using PALs and PLAs 18/9/17 11 Project: 1. To design automated system for washing machine 2. To design control system for lift 25/9/17 111 I. To design automated system for washing machine 2. To design control system for lift 25/9/17 111 I. To design automated system for lift 25/9/17 111 I. To design control system for lift 25/9/17 111 I. To design control system for lift 25/9/17 111 I. To design control system for lift 25/9/17 111 I. To design control system for lift 25/9/17 11 I. To design control system for lift 25/9/17 11 Research 2. Core 3. Multidisciplinary 4. Application 11 Research 2. Core 3. Multidisciplinary 4. Application 2 Learn to Make NAND Gate SE 4-5 Mini http://cir com/logi 2 Learn to Make NAND Gate SE 4-5 Mini http://cir com/logi 3 Literature survey loT for Envirnoment management SE 4-5 Mini www.elsr locate/csi No.				Activity:	Learning	Group	
11 Project: 1. To design automated system for washing machine 2. To design control system for lift 25/9/17 11 1. To design automated system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 25/9/17 11 1. To design control system for lift 1. To design control system for lift 11 1. Research 2. Core 3. Multidisciplinary 4. Application 2. No Project Title/Group Size Class Group Size/ Project Hours Project Type Referen Hours 1 Simple Logic Gate Processor SE 4-5 Mini http://cir com/logi 2 Learn to Make NAND Gate SE 4-5 Mini http://cir com/logi 3 Literature survey on IoT for Agriculture SE 4-5 Mini www.elst locate/csi 4 Literature survey loT for Envirnoment management SE 4-5 Mini www.elst locate/csi No. Planned Completed No. of Planned Completed No. of Planned Co	and observing PALs and PLAs 18/9/17	erving nd PLAs 1	Case Study on: Case study on Evaluating and obse Boolean expression using PALs ar			10	
Iini /Minor Projects Objective: To get hands on experience to execute projects with respect student choice in the following areas. (30 Hrs / Semester / Student). (Total 120 Hrs) The areas are: 1. Research 2. Core 3. Multidisciplinary 4. Application S.No Project Title/Group Size Class Group Size/Project Hours Project Type Referen the following areas: 1 Simple Logic Gate Processor SE 4-5 Mini http://cir com/logi 2 Learn to Make NAND Gate SE 4-5 Mini http://cir com/logi 3 Literature survey on IoT for Agriculture SE 4-5 Mini www.elsk 4 Literature survey IoT for Envirnoment management SE 4-5 Mini www.elsk No. Planned Completed No. of Planned	rstem for washing 25/9/17 m for lift	r washing 2	 Project: 1. To design automated system for machine 2. To design control system for lift 			11	
1 Simple Logic Gate Processor SE 4-5 Mini http://cir 2 Learn to Make NAND Gate SE 4-5 Mini http://cir 3 Literature survey on IoT for Agriculture SE 4-5 Mini www.else locate/csi 4 Literature survey IoT for Envirnoment management SE 4-5 Mini www.else locate/csi No. Planned Completed No. of Planned Completed	2. Core 3. Multidisciplinary 4. Application	3. Multi	2. Core	earch	eas are: 1. Rese	The ar	
2 Learn to Make NAND Gate SE 4-5 Mini http://cir 3 Literature survey on IoT for Agriculture SE 4-5 Mini www.else locate/csi 4 Literature survey IoT for Envirnoment management SE 4-5 Mini www.else locate/csi No. Planned Completed No. of Planned Completed No.	2. Core 3. Multidisciplinary 4. Application Group Class Class Class Class Group Size/ Project Hours Class	3. Multi G Class F H	2. Core	arch itle/Group Siz	eas are: 1. Rese Project T	S.No	
3 Literature survey on IoT for Agriculture SE 4-5 Mini www.else locate/csi 4 Literature survey IoT for Envirnoment management SE 4-5 Mini www.else locate/csi 0 Planned Completed No. of Planned	2. Core 3. Multidisciplinary 4. Application 2. Core 3. Multidisciplinary 4. Application Class Group Size/ Project Hours Project Type Reference sor SE 4-5 Mini http://circuites com/logic-gat	3. Multi Class F SE 4	2. Core e	earch itle/Group Siz	eas are: 1. Rese Project T Simple Lo	S.No	
4 Literature survey IoT for Environment management SE 4-5 Mini www.else locate/csi 4 Environment management Image: SE	2. Core 3. Multidisciplinary 4. Application Class Group Size/ Project Hours Project Type Reference sor SE 4-5 Mini http://circuiter.com/logic-gate SE SE 4-5 Mini http://circuiter.com/logic-gate	3. Multi Class P F SE 4 SE 4	2. Core e essor	earch itle/Group Siz ogic Gate Proce	eas are: 1. Rese Project T Simple Lo Learn to N	S.No	
No. Planned Completed No. of Planned Completed No. of Planned Completed	2. Core 3. Multidisciplinary 4. Application Class Group Size/ Project Hours Project Type Reference sor SE 4-5 Mini http://circuiteacom/logic-gailed com/logic-gailed r SE SE 4-5 Mini http://circuiteacom/logic-gailed com/logic-gailed r SE 4-5 Mini http://circuiteacom/logic-gailed com/nand-gailed r SE 4-5 Mini http://circuiteacom/nand-gailed	3. Multi Class SE 4 SE 4 SE 4	2. Core e essor ate for	earch itle/Group Siz ogic Gate Proce Make NAND Ga survey on IoT e	eas are: 1. Rese Project T Simple Lo Learn to N Literature Agriculture	S.No 1 2 3	
No. Planned Completed No. of Planned Completed No. of Planned C	2. Core 3. Multidisciplinary 4. Application Class Group Size/ Project Hours Project Type Reference sor SE 4-5 Mini http://circuites. com/logic-gat a SE 4-5 Mini http://circuites. com/logic-gat a SE 4-5 Mini http://circuites. com/nand-gat r SE 4-5 Mini www.elsevier.clocate/csi nt SE 4-5 Mini www.elsevier.clocate/csi	3. Multi Class SE 4 SE 4 SE 4 SE 4	2. Core e e essor ate for	earch itle/Group Siz ogic Gate Proce Make NAND Ga survey on IoT e survey IoT for ent managem	Project T Simple Lo Learn to M Literature Agriculture Envirnome	The ar	
	2. Core 3. Multidisciplinary 4. Application Class Group Size/ Project Hours Project Type Reference sor SE 4-5 Mini http://circuiteacom/logic-gate a SE 4-5 Mini http://circuiteacom/logic-gate r SE 4-5 Mini http://circuiteacom/logic-gate nt SE 4-5 Mini http://circuiteacom/logic-gate nt SE 4-5 Mini www.elsevier.clocate/csi	3. Multi Class SE 4 SE 4 SE 4 SE 4	2. Core e e essor ate for eent	earch itle/Group Siz ogic Gate Proce Make NAND Ga survey on IoT e survey IoT for ent managem	Project T Simple Lo Learn to N Literature Agriculture Envirnome	The ar	
	2. Core 3. Multidisciplinary 4. Application Class Group Size/ Project Hours Project Type Reference sor SE 4-5 Mini http://circuites.com/logic-gailes.com/logiles.com/logic-gailes.co	3. Multi Class 9 SE 4 SE 4 SE 4 SE 4 SE 4 SE 4 Planned 0	2. Core e e essor ate for nent No. of	itle/Group Siz	Project T Simple Lo Learn to M Literature Agriculture Envirnome Planned	The ar	

			TCET				<u></u>
	PARTMENT Credit Based Gran	OF INFO	RMAT	ION TECH	NOLOG	SY (IT)	tcet
INEERS		CBC	GS-2012	(R)		3	Estd. 2001
of Basi Prac Exp: Desi Base Exp: Grou Lear g: 02 Mini Proje 2 Case stud	c 03 gn e 06 up nin 2 ect: e y: 1	Assign ments	03		Tutorial		
DOSLNE:			DOS	LE (engaged ir	some oth	er dates):	
be mapped at 3. Entry for DOSL (Ms. Sw	the end of the semeste E (engaged on some of ati Abhang)	er. her date) shall	be done wit	h proper mapping	to DOSLNE.		
(Mr. Yele Name & Signa	Vijaykumar) Iture of Faculty	Signat	ure of HC	D Signat	ure of Prin	icipal / Dea	n Academi