

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

						R	20 CO	-PO-PS	O GRA	ND MA	ATRIX		7. 7. 11-W			
By	the e	end of e	each co	urse st	udent	will be	able to	0								
									1-1							
		CO1	Solve	the dif	ferentia	l equati	ons rela	ated to	various	engine	ering fi	elds				
		CO2						l life pr								
		CO3	Famili	arize w	ith fun	ctions o	f sever	al varial	oles wh	ich is us	seful in	optimiza	ition			
		CO4	Apply	double	integra	ation te	chniqu	es in ev	aluatin	gareas	bounde	ed by reg	ion.			
20BS1101	Mathematics – I	CO5		-		ls of ca coordi		_	dimen	sions. S	Student	s will be	come fan	niliar wit	h 2-dime	ensional
BS1	em		1 204	200	200	DO 4	205	200		200		2010	2011	2012	DC04	2000
20	ath	604	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	Ĕ	CO1	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO2	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO3	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO4	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO5	3	2	-	_	-	-	-	-	_	-	-	1	-	-
		CO1				ciples s		nterfere	ence and	d diffra	ction to	design a	nd enhar	nce the re	esolving p	oower
		CO2	Learn	the bas	sic conc	epts of	LASEI	R light S	Sources	and Ap	ply the	m to hol	ography			
		CO3	Study	the m	agnetic	and die	electric	materia	ls to er	hance	the util	ity aspec	ts of mat	terials.		
	S	CO4	Learn	the fur	damen	tal con	cepts o	f Quant	um beh	aviour	of matt	er.				
2	/sic	CO5	Identi	fy the t	ype of s	semicor	nductor	s using	Hall Eff	ect.						
110	Ph)				,		,									
20BS1105	pplied Physics		PO1	PO 2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	Ар	CO1	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO2	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO3	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO4	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO5	3	2	-	-	-	-	-	-	-	-	-	1	-	-
			1	1	1		1	1	1	1		1	1	1	1	1
		CO1		•		•	•	ces of sp sh (L3)		nforma	tion fro	m social	or transa	ectional d	lialogues	
	_	CO2											d forms (
	lish	CO3	speak	clearly	on a sp	ecific to	opic usi	ng suita	ble dis	course	marker	s in infor	mal discı	ussions (I	L3)	
101	English	CO4										ening te				
51	/e	CO5										t/table (I	_4)			
20HS1101	ati∿	CO6	take n	otes w	hile list	ening to	a talk,	/lecture	to ans	wer que	estions	(L3)				
"	Communicative															
	mu	-	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	mo	CO1	-	-	-	-	-	-	-	-	2	3	-	1	-	-
	Ŭ	CO2	-	-	-	-	-	-	-	-	2	3	-	1	-	-



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													17.00-20			
		CO3	-	-	-	-	-	-	-	-	2	3	-	1	-	-
		CO4	-	-	-	-	-	-	-	-	2	3	-	1	-	-
		CO5	-	-	-	_	-	_	-	-	2	3	-	1	_	-
		CO6	_	_	_	-	_	_	-	-	2	3	_	1	_	-
					<u> </u>		1							_	l	
		CO1	Undor	atand a	laamiths	na and	hasis to	i	or of (7						
	g C	CO1			lgorithr						1.					
	usir	CO2		•	ms using											
	ing	CO3					•			or linea	ar data	handling				
	No.	CO4			ne use o											
01	m S	CO5	Imple	ment va	arious o	peration	ns on c	lata file	S							
11	pple															
20ES1101	. Pro		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
7	for	CO1	1	2	3	2	1	-	-	-	3	3	1	2	1	2
	nin	CO2	2	3	3	2	-	-	-	-	1	1	2	2	2	2
	J.W.	CO3	3	3	3	2	-	-	-	-	2	1	2	2	2	3
	Programming for Problem Solving using C	CO4	2	2	2	2	-	-	-	-	2	1	2	2	2	2
	Pr	CO5	2	2	2	2	-	-	-	-	2	1	2	2	1	2
		l.		l		I	1	l	I	I	ı	ı		I	I	l.
		CO1	Prena	re engi	neering	drawin	gs as ne	er BIS o	onvent	ions {U	Indersta	nd level,	KL2}			
		CO2												ces using	CAD so	ftware
	r,	002		ly level		01101010	. 01 010		no proj		01 21110	5 4114 1 10	50110		, 0112 50	201101
	esig	CO3		•		of ortho	graphic	projec	tions of	f Solids	to repr	esent en	gineerin	ginforma	ation/cor	cepts
	Ď				the sam						-		B	5		
	anc	CO4											s in Real	time Apr	olications	{Apply
02	ics		level,													C -1-1-7
20ES1102	phi	CO5			netric di	rawings	of sim	ole obie	cts rea	ding the	o ortho	graphic n	rojectio	ns of tho		
OES	Gra		object	•		_		,		unig un				113 01 1110.	se	
7	ng (vze ieve	· · · · · · · · · · · · · · · · · · ·				unig tin		5. a b e b	,	113 01 1110.	se	
	·=		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	ē	CO1	PO1 2				PO5 3	PO6	PO7 -				,			PSO2
	ineer	CO1		PO2	PO3	PO4					PO9	PO10	PO11	PO12	PSO1	PSO2
	:ngineer	CO2	2	PO2 1 1	PO3 1 1	PO4 -	3	-			PO9	PO10 2 2	PO11	PO12 1 1	PSO1	-
	Engineering Graphics and Design	CO2 CO3	2 2 2	PO2 1 1 2	PO3 1 1 2	PO4 - -	3 3 3	-	-		PO9 - -	PO10 2 2 2	PO11 -	PO12 1 1 1	PSO1	-
	Engineer	CO2 CO3 CO4	2 2 2 2	PO2 1 1 2 2	PO3 1 1 2 2	PO4 - -	3 3 3	- -	-		PO9 - -	PO10 2 2 2 2	PO11 - -	PO12 1 1 1 1	PSO1	-
	Engineer	CO2 CO3	2 2 2	PO2 1 1 2	PO3 1 1 2	PO4 - -	3 3 3	- -	-		PO9 - -	PO10 2 2 2	PO11 - -	PO12 1 1 1	PSO1	-
	Engineer	CO2 CO3 CO4 CO5	2 2 2 2 2	PO2 1 1 2 2 2	PO3 1 1 2 2 2	PO4 - - - -	3 3 3 3 3		- - -	PO8	PO9	PO10 2 2 2 2 2 2	PO11	PO12 1 1 1 1 1 1 1	PSO1	- - - -
		CO2 CO3 CO4	2 2 2 2 2 2 identi	PO2 1 1 2 2 2 fy the c	PO3 1 1 2 2 2 2 context,	PO4 topic, a	3 3 3 3 3	- - - - -	- - - - -	PO8 nforma	PO9 tion fro	PO10 2 2 2 2 2 2 2 m social	PO11 or transa	PO12 1 1 1 1 1 1 1 cetional c	PSO1 lialogues	- - - -
		CO2 CO3 CO4 CO5	2 2 2 2 2 2 identi spoke	PO2 1 1 2 2 2 2 fy the cen by na	PO3 1 1 2 2 2 context, ative specifications	PO4 topic, a	3 3 3 3 3 and piece of Engli	- - - - - ees of sp	- - - - -	PO8 nforma	PO9 tion fro	PO10 2 2 2 2 2 2 2 m social	PO11 or transa	PO12 1 1 1 1 1 1 1	PSO1 lialogues	- - - -
		CO2 CO3 CO4 CO5	2 2 2 2 2 2 identi spoke	PO2 1 1 2 2 2 2 fy the con by naters in in	PO3 1 1 2 2 2 context, tive spectormal	PO4 topic, a eakers of discuss	3 3 3 3 3 and piece of Englisions (L		- - - - - pecific i	PO8 nforma	PO9 tion from a speci	PO10 2 2 2 2 2 2 2 m social cific topic	PO11 or transac using s	PO12 1 1 1 1 1 uitable d	PSO1 lialogues iscourse	
		CO2 CO3 CO4 CO5	2 2 2 2 2 2 identi spoke marke	PO2 1 1 2 2 2 2 fy the cent by nation in the cent will	PO3 1 1 2 2 2 2 context, tive speciformal	PO4 topic, a eakers of discusseming to	3 3 3 3 3 and piece of Engli sions (Let a talk/			PO8 nformalearly o	PO9 tion fron a specestions in	PO10 2 2 2 2 2 2 m social eific topion English	PO11 or transac using s	PO12 1 1 1 1 1 cuitable d ate sente	PSO1 lialogues iscourse	- - - -
1021		CO2 CO3 CO4 CO5	2 2 2 2 2 identi spoke marke take n prope	PO2 1 1 2 2 2 2 fy the cen by naters in interest where substituting the control of the center of the	PO3 1 1 2 2 2 2 context, tive speciformal hile lister matical	PO4 topic, a eakers of discusseming to	3 3 3 3 3 and piece of Engli sions (Let a talk/			PO8 nformalearly o	PO9 tion fron a specestions in	PO10 2 2 2 2 2 2 m social eific topion English	PO11 or transac using s	PO12 1 1 1 1 1 cuitable d ate sente	PSO1 lialogues iscourse	- - - -
S1102L		CO2 CO3 CO4 CO5	2 2 2 2 2 identi spoke market take n prope exami	PO2 1 1 2 2 2 2 fy the con by na ers in innotes where the substitutions in the substitutions in the substitution in the substi	PO3 1 1 2 2 2 2 context, tive speciformal hile lister matical is (L3)	PO4 topic, a eakers of discussering to structure	3 3 3 3 3 and piece of Englisions (Lee a talk/res and	es of sp sh and s 3)		PO8 nforma learly o wer que	PO9 tion from a special strong in a spe	PO10 2 2 2 2 2 2 m social cific topic n English anguage	PO11 or transac using s	PO12 1 1 1 1 1 ctional cuitable d ate sente ely in con	PSO1 lialogues iscourse nces usin	- - - -
OHS1102L		CO2 CO3 CO4 CO5	2 2 2 2 2 identi spoke marke take n prope exami	PO2 1 1 2 2 2 fy the cen by nates in interest where gramminations summations summations.	PO3 1 1 2 2 context, tive speciformal hile liste matical is (L3) aries base	PO4 topic, a eakers of discussioning to structure seed on a	3 3 3 3 3 and piece of Engli sions (Leta a talk/res and	ees of sp sh and s 3) lecture; correct		PO8 nforma learly o wer que orms; an	PO9 tion from a special strong in a spe	PO10 2 2 2 2 2 m social eific topic in English anguage	PO11 or transac using s n; formul effective	PO12 1 1 1 1 1 actional cuitable duitable	PSO1 lialogues iscourse nces usin mpetitive herent w	- - - -
20HS1102L		CO2 CO3 CO4 CO5	2 2 2 2 2 identi spoke market take n prope exami write interp	PO2 1 1 2 2 2 2 fy the cent by nationers in interest will represent the property of the cent of the property of the proper	PO3 1 1 2 2 2 2 context, ative speciformal hile lister matical is (L3) aries base a figure.	PO4 topic, a eakers c discussening to structure sed on a /graph/	3 3 3 3 and piece of Englisions (Leo a talk/res and	es of spsh and s 3) lecture; correct		PO8 nforma early o wer que orms; an	PO9 tion from a special strong in a special strong in a special strong in the s	PO10 2 2 2 2 2 2 m social cific topic anguage tening tenin	PO11 or transac using s n; formul effective	PO12 1 1 1 1 ctional cuitable d ate sente ely in confiderate of committee a cooff cooff committee a cooff cooff committee a cooff co	PSO1 lialogues iscourse nces usin mpetitive herent w unication	- - - - -
20HS1102L		CO2 CO3 CO4 CO5 CO1	2 2 2 2 identi spoke market take n prope exami write interp	PO2 1 1 2 2 2 2 fy the cen by nates in interest where gramminations summate or earling a PO2	PO3 1 1 2 2 context, tive speciformal hile liste matical is (L3) aries base	PO4 topic, a eakers of discussioning to structure seed on a	3 3 3 3 3 and piece of Englisions (Leta a talk/res and global cet/chart/tet/tet/tet/tet/tet/tet/tet/tet/tet/t	ees of sp sh and s 3) lecture; correct comprel		PO8 nforma learly o wer que orms; an	PO9 tion from a special strong in a spe	PO10 2 2 2 2 2 2 m social cific topic an English anguage tening t	PO11 or transac using s n; formul effective	PO12 1 1 1 1 1 actional countable duitable duitable duitable duce a coordinate comment of comments.	PSO1 lialogues iscourse nces usin mpetitive herent w	- - - -
20HS1102L		CO2 CO3 CO4 CO5 CO1	2 2 2 2 2 identi spoke market take n prope exami write interp	PO2 1 1 2 2 2 2 fy the cent by nationers in interest will represent the property of the cent of the property of the proper	PO3 1 1 2 2 2 2 context, ative speciformal hile lister matical is (L3) aries base a figure.	PO4 topic, a eakers c discussening to structure sed on a /graph/	3 3 3 3 3 and piece of Englisions (Leo a talk/res and global ce/chart/t	es of sp sh and s 3) lecture; correct comprel table; an		PO8 nforma early o wer que orms; an	PO9 tion from a special strong in a special strong in the s	PO10 2 2 2 2 2 2 m social eific topic anguage tening tenin	PO11 or transac using s n; formul effective	PO12 1 1 1 1 1 actional countable duitable	PSO1 lialogues iscourse nces usin mpetitive herent w unication	- - - - -
20HS1102L	Communicative English Lab-I Engineer	CO2 CO3 CO4 CO5 CO1	2 2 2 2 identi spoke market take n prope exami write interp	PO2 1 1 2 2 2 2 fy the cen by nates in interest where gramminations summate or earling a PO2	PO3 1 1 2 2 2 2 context, ative speciformal hile lister matical is (L3) aries base a figure.	PO4 topic, a eakers c discussening to structure sed on a /graph/	3 3 3 3 3 and piece of Englisions (Leta a talk/res and global cet/chart/tet/tet/tet/tet/tet/tet/tet/tet/tet/t	ees of sp sh and s 3) lecture; correct comprel		PO8 nforma early o wer que orms; an	PO9 tion from a special strong in a spe	PO10 2 2 2 2 2 2 m social cific topic an English anguage tening t	PO11 or transac using s n; formul effective	PO12 1 1 1 1 1 actional countable duitable duitable duitable duce a coordinate comment of comments.	PSO1 lialogues iscourse nces usin mpetitive herent w unication	- - - - -



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		1	1					-	Se o control for semiline	Constitution of the second	от оролоо	red Departin				
		CO1		rehend					langua	age						
	ing	CO2	Devel	lop algo	orithms	and fl	owchar	ts								
	Solv	CO3	Desig	gn and o	develop	ment o	f C pro	oblem s	olving	skills.						
	em;	CO4	Acqu	ire mod	lular pi	rogramı	ning sk	tills.								
20ES1103L	robl															
S11	or P		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
20E	ing (CO1	1	2	3	2	1	_	_	_	3	3	1	2	1	2
	amm	CO2	2	3	3	2	_	_	_	_	1	1	2	2	2	2
	Programming for Problem Solving	CO3	3	3	3	2	_	_	_	_	2	1	2	2	2	3
	Ь	CO4	2	2	2	2	_	_	-	-	2	1	2	2	2	2
	Į		I								ı	1	<u>I</u>		<u>I</u>	1
		CO1	Apply	y know	ledge o	f Interf	erence	concep	ts of li	ght(L3))					
		CO2		y know								ated				
		CO3		the app												
	Lab	CO4	Defin	Define Acoustics of buildings and NDT applications (L1) Define material properties and nuclear power generation(L1)												
19	ics	CO5	Define material properties and nuclear power generation(L1)													
20BS1106L	Physics Lab															
BS:	d P		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
20	Applied	CO1	3	3	3	2	2	-	-	-	-	-	-	-	-	-
	App	CO2	2	2	2	3	2	-	-	-	-	-	-	-	-	-
		CO3	3	2	2	2	3	-	-	-	-	-	-	-	-	-
		CO4	2	2	3	3	3	-	-	-	-	-	-	-	-	-
		CO5	3	2	3	2	2	-	-	-	-	-	-	-	-	-
		00:	Б. 1		•	, • .1			<u> - </u>	1.	•	. 1		1: cc	1 1.7	
		CO1	(EVA	LUAT	E)										algorith	
		CO2	and b	ackwar	d interp							Gauss Seand unequ			wton's fo LVE,	orward
		663		Y,FIN		.:			:	aal. C			:cc			
		CO3			_				_			•		•	ons to its	
				tical cor /,FIND)	nputati	ons and	a aiso b	у саріас	te the t	ranstor	ms tor	solving d	irrerentia	ai equatio	ons (SOL\	/E,
202	tics	CO4		<u> </u>	ute the	Fourie	r series	of perio	ndic sig	nals (SC	DIVF A	PPLY, FIN	ID. ANAI	YSF)		
20BS1202	ma	CO5	1											-	form to i	range
20B	Mathematics			n-perio			_				a.			crans		~0~
	Ма		1				·	·								
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	-	-	-	-	_	_	-	-	-	1	-	-
		CO2	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO3	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO4	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO5	3	2	-	-	-	-	-	-	-	-	-	1	-	-



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		CO1	_	in the parting p	•		perties	and app	olication	ns of the	ermopla	astics, the	ermosetti	ings, elas	tomers a	nd	
		CO2					ious ms	ateriale	and the	ir 11000	in the co	onetructi	on of hat	teries an	d fuel cel	1c	
		CO3						materi					on or bat	iciics air	u luci cei	15.	
	_	CO4											molecula	ar machir	nes, need	l of	
	str	CO4		chemis	•	o oi sup	iaiiioie	cuiai ci	CIIIISU	y iii tiie	аррпса	1110113 01	illolecula	ii iiiaciiii	163, 11660	101	
60	Chemistry	CO5				s of spe	ectrome	etry suc	h as UV	/ IR an	d NMR						
20BS1209	S		e April	со р				20. 7 00.0		,,	<u> </u>						
	Applied		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
``	ldd	CO1	2	2	-	-	-	-	3	-	-	-	-	-	-	-	
	Α .	CO2	2	2	-	-	-	-	2	-	-	-	-	-	-	-	
		CO3	2	2	-	-	-	-	2	-	-	-	-	-	-	-	
		CO4	2	2	-	-	-	-	3	-	-	-	-	-	-	-	
		CO5	2	2	-	-	-	-	3	-	-	-	-	-	-	-	
		CO1	Able	ble to understand the concepts of electrical circuits and verify theorems in DC circuits. ble to analyse different concepts of single phase AC circuits ble to explain the working and applications of DC machines.													
		CO2															
	ing	CO3		1 0 1													
	eer	CO4															
-	Electrical Engineering	CO5	: Able														
20ES1204	En		T	1		ı	ı	ı	1	1	1	ı	ı		Т		
ES1	ical		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
20	ectr	CO1	3	2	-	-	-	-	-	-	-	-	-	1	-	-	
	Ele	CO2	3	2	-	-	-	-	-	-	-	-	-	-	-	-	
	Basic	CO3	3	2	-	-	-	-	-	-	-	-	-	1	-	-	
	B	CO4	3		-	-	-	-	-	-	-	-	-	1	_	-	
		CO3	3	2		_	_	_	_			_	_	1		_	
		CO1	_		algehr	a and e	noineer	ing tool	s like r	nesh an	d node	methods:	o solve v		C circui		
		COI		ems {A				ing tool	S IIKC I	nesii an	d Hode	memous	to solve	various L	oc cheur		
		CO2										niques, s	kills to s	olve the	AC circu	it	
								ions. { A							1.50	1	
		CO3						chnıque erstand			s and th	neorems	to analyz	ze the bot	th DC an	d AC	
			Circui	t proble	enis en	ectivery	. { Ond	erstand	ievei, r	XL2}							
		CO4	Learn	s and g	ain the	knowle	dge on	charact	eristics	of two	port net	work na	rameters	(Z. Y. A	BCD, h	& g)	
05		00 .										lerstand 1			202,11	50 8)	
312	NA	CO5	Analy	ze the	DC tran	sients i	n RL, F	RC and	RLC ci	rcuits in	n detail				eneous ar	nd non-	
20ES1205	_		homo	geneou	s differ	ential e	quation	s.{ Ana	lyze le	vel, KL	4}						
7			Т	1		T	T	T	Г	1	1	T	T	T	T		
		0.0	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
		CO1	3	2	-	-	-	-	-	-	-	-	-	-	-		
		CO2	3	2	-	-	-	-	-	-	-	-	-	-	-		
		CO3	3	2	-	-	-	-	-	-	-	-	-	-	-		
		CO4	3	3	-	-	-	-	-	-	-	-	-	-	-	-	
		CO5	2	3	-	-	-	-	-	-	-	_	-	-	-		
	<u> </u>			1						1	1						



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	1		Ι											-		
		CO1											epts like	e data typ	es, cont	amers.
	ڃ	CO2	Solve	coding	tasks i	related	to cond	litions,	loops a	and Stri	ing pro	cessing				
	/tho	CO3											to build	modules	and pac	kages
	Programming for Problem Solving using Python			al softw			and Still			r-0.00					and put	
	usir	CO4	1	ement F			t onice t	ad mair	oinles	n Dr.41-	00					
ဟ	ving	CO4							cipies	n Pyth	OII.					
20ES1206	Sol	CO5	Identi	fy solu	tions us	sing G	\cup I in P	ython								
S1	lem															
8	Prok		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
7	for	CO1	1	2	2	1	_	_	_	_	_	_	_		_	_
	ning	CO2	1	2	2	1	_	_	_			_	_			
	amu									-	-				-	-
	rogr	CO3	1	3	3	2	1	-	-	-	-	-	-		-	-
	٩	CO4	1	2	2	2	-	-	-	-	-	-	-		-	-
		CO5	1	2	2	2	1	-	-	-	-	-	-		-	1
	þ	CO1	To est	timate t	he amo	unt of 1	netal io	ns prese	ent in d	ifferent	solutio	ns (L4 &	L3	•	•	•
	'La	CO2		alyze th												
0	Applied Chemistry Lab	CO3				• •				W Licino	diffor	nt inctru	mentati	on techn	iauas /I 2	1
21	ij	CO3														
20BS1210L	Che	_	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	eq	CO1	-	3	2	-	-	-	-	1	2	-	-	2	-	-
,,,	ildo	CO2	-	2	3	-	-	-	-	1	3	-	-	1	-	-
	Ą	CO3	-	1	2	-	-	-	-	1	2	-	-	1	-	-
		CO1	Able	to analy	ze a giv	ven net	work by	applyi	ng elec	trical la	ws and	network	theorem	ns	1	ı
		CO2										itations.	111001011	15.		
	Q			o analy		_										
	La	CO3				eriorii	iance ci	iaracte	ristics c	ווו טע וו	acrimes)				
												C 4		•		
	ing	CO4						•				of 1-phas	se Transf	ormer		
	ering	CO5		o meas o analy				•				•	se Transf	ormer		
7.	ineering							•				•	se Transf	ormer		
.207L	:ngineering							•				•	PO11	PO12	PSO1	PSO2
ES1207L	al Engineering	CO5	Able t	o analy	se the p	erform	nance cl	naracte	ristics c	of AC m	achines			PO12	PSO1	PSO2
20ES1207L	rical Engineering	CO5	PO1	PO2	se the p	PO4	PO5	PO6	ristics c	of AC m	achines	PO10	PO11		PSO1	
20ES1207L	ectrical Engineering	CO5 CO1 CO2	PO1 3 3	PO2 2	PO3	PO4 -	PO5	PO6	PO7	of AC m	achines	PO10 -	PO11 - -	PO12 1	-	
20ES1207L	Electrical Engineering Lab	CO5 CO1 CO2 CO3	PO1 3 3 3	PO2 2 2	PO3	PO4	PO5	PO6 - -	PO7	of AC m	PO9	PO10	PO11 - -	PO12 1	-	
20ES1207L	isic Electrical Engineering	CO5 CO1 CO2 CO3 CO4	PO1 3 3 3 3 3	PO2 2	PO3	PO4 -	PO5	PO6	PO7	of AC m	PO9	PO10 -	PO11 - -	PO12 1 - 1 -	-	
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3	PO1 3 3 3	PO2 2 2	PO3	PO4	PO5	PO6 - -	PO7	of AC m	PO9	PO10	PO11 - -	PO12 1	-	
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4	PO1 3 3 3 3 3	PO2 2 2	PO3	PO4	PO5	PO6 - -	PO7	of AC m	PO9	PO10	PO11 - -	PO12 1 - 1 -	-	
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4 CO5	PO1 3 3 3 3 3 3 3	PO2 2 2 - 2 -	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11 - -	PO12 1 - 1 -	-	
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4	PO1 3 3 3 3 Comp	PO2 2 2 - 2 - 2 orehend	PO3 how se	PO4	PO5	PO6 to buil	PO7 d right	PO8 out of	PO9	PO10	PO11	PO12 1 - 1 - 1		
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4 CO5	PO1 3 3 3 3 Comp	PO2 2 2 - 2 - 2 orehend	PO3 how se	PO4	PO5	PO6 to buil	PO7 d right	PO8 out of	PO9	PO10	PO11	PO12 1 - 1 -		
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4 CO5	PO1 3 3 3 3 3 Comp	PO2 2 2 - 2 - 2 - prehend	PO3 s the uses	PO4 oftware	PO5	PO6 to buil	PO7 d right	PO8 out of	PO9	PO10	PO11	PO12 1 - 1 - 1		
20ES1207L	Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2	PO1 3 3 3 3 Comp	PO2 2 2 - 2 - corehendonstrateding local	PO3 s the us	PO4 oftware se of ar condit	PO5 e easily interprionals	PO6 to buildreted la	PO7 d right	PO8 out of	PO9 the box	PO10 solving t	PO11	PO12 1 - 1 - 1		
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3	PO1 3 3 3 3 3 Comp	PO2 2 2 - 2 - 2 - corehend constrate ding locations with	PO3	PO4 oftware se of ar condit	PO5 e easily interprionals	PO6 to buildereted la	PO7 d right nguage	PO8 out of e for pr	PO9	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control s	- - - - -	- - - -
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2	PO1 3 3 3 3 3 Comp Demo	PO2 2 2 - 2 - 2 - orehend onstrate ding loc ice with	PO3	PO4 oftware se of ar condit	PO5 e easily interprionals	PO6 to buildereted la	PO7 d right nguage	PO8 out of e for pr	PO9	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1	- - - - -	- - - -
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	PO1 3 3 3 3 3 Comp Demo	PO2 2 2 - 2 - orehend onstrate ding locationstrate les	PO3 s the us	PO4 conditeructure	PO5	PO6 to build reted la uick proor real	PO7 d right nguage	PO8 out of e for pr	PO9 the box oblem :	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control s	- - - - -	- - - -
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3	PO1 3 3 3 3 3 Comp Demo	PO2 2 2 - 2 - 2 - orehend onstrate ding loc ice with	PO3 s the us	PO4 conditionary conditi	PO5	PO6 to build reted la uick proor real	PO7 d right nguage	PO8 out of e for pr	PO9 the box oblem :	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control s	- - - - -	- - - -
20ES1208L 20ES1207L	Python Lab Basic Electrical Engineering	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	PO1 3 3 3 3 3 Comp Demo include Practi Demo modu Comp	PO2 2 2 - 2 - 2 - crehend constrate ding location with constrate les crehend	PO3	PO4	PO5	PO6 to build reted la uick pror real in the control of the c	PO7 d right nguage ogrami needs b	PO8 out of e for pr ming sc by breal	PO9	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control si	tatement	
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	PO1 3 3 3 3 3 Comp Demo	PO2 2 2 - 2 - orehend onstrate ding locationstrate les	PO3 s the us	PO4 conditionary conditi	PO5	PO6 to build reted la uick proor real	PO7 d right nguage	PO8 out of e for pr	PO9	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control s	- - - - -	- - - -
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	PO1 3 3 3 3 3 Comp Demo include Practi Demo modu Comp	PO2 2 2 - 2 - 2 - crehend constrate ding location with constrate les crehend	PO3	PO4	PO5	PO6 to build reted la uick pror real in the control of the c	PO7 d right nguage ogrami needs b	PO8 out of e for pr ming sc by breal	PO9	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control si	tatement	
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	PO1 3 3 3 3 3 Comp Demo include Practi Demo modu Comp	PO2 2 2 - 2 - 2 - crehend constrate ding location with constrate les crehend	PO3	PO4	PO5	PO6 to build reted la uick pror real in the control of the c	PO7 d right nguage ogrami needs b	PO8 out of e for pr ming sc by breal	PO9	PO10 solving t	PO11 hrough	PO12 1 - 1 - 1 control si	tatement	
	Basic	CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 CO1	PO1 3 3 3 3 3 Composition of the	PO2 2 2 2 - 2 - 2 - 2 - brehend constrate ding loc ice with constrate les brehend PO2 -	PO3 the software post and a data stars software post a data sta	PO4	PO5	PO6	PO7 d right nguage ogramn needs t	PO8 out of e for pr ming sc by breal	PO9	PO10 solving t t code in	PO11 hrough of	PO12 1 - 1 - 1 control si	tatement	



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				l .			T _					red Departin	redicts.			1
		CO4	2	1	2	2	2	-	-	-	3	2	-	-	-	-
		CO5	-	3	3	2	3	-	-	-	3	2	-	-	-	-
		CO1	demo	cratic I	ndia.							and its in				
		CO2	Under	rstand t	he fund	ctioning	g of thre	ee wing	s of the	e gover	nment	ie., exec	utive, leg	gislative	and judi	ciary.
	_	CO3	Under	rstand t	he valu	e of the	e funda	mental	rights	and du	ties for	becomir	ng good	citizen o	f India.	
	ion	CO4										nd local				
20MC1201	Constitution	CO5	Apply Comn	the kn	owledg and Ul	ge in str PSC for	rengthe r sustai	ning of ning de	the co mocra	nstituti cy.	onal in	stitutions	s like CA	AG, Elec	tion	
ĭ	Co															
20	an		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	Indian	CO1	-	-	_	_	_	-	•	-		_	-	1	-	-
	_	CO2	-	-	-	-	-	-	-	-	-	-	-	1	-	-
		CO3	-	-	-	-	-	-	-	-	-	-	-	1	-	-
		CO4	-	-	-	-	-	-	-	-	-	-	-	1	-	-
		CO5	-	-	-	-	-	-	-	-	-	-	-	1	-	-
		ı	<u>I</u>	I.	I.	I.	<u> </u>	<u>I</u>		I.	1	ı	ı	1	1	ı
									II-I							
		CO1	Devel	op the i	use of n	natrix a	lgebra t	techniqu	ies that	is need	led by e	ngineers	for prace	tical app	lications	(L6)
		CO2										on, Gaus				
		CO3													ence (L5)	
	=	CO4										g vector o			(-0)	
7	S-I	CO5										at mode			ses (L3)	
11;	ıtic			,			· • · Þ	3.3.1 0	. 5. 5.11	Jyu			r, 5.00	12. 2 3 2 3 2	()	
20BS2112	Mathematics –III		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
7	latl	CO1	3	2	-	-	-	-	-	-	-	-	-	1	-	-
	Σ	CO2	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO3	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO4	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO5	3	2	-	-	-	-	-	-	-	-	-	1	-	-
		CO1										ons (Unde	erstand le	evel)		
		CO2	Demo	nstrate	the usa	ge of di	iodes in	variou	s applic	ations	(Apply	level)				
		CO3	Explai	n the w	orking	princip	les of B.	JTs and	FETs (L	Indersta	and lev	el)				
		CO4	Learn	the art	of bias	ing of B	JTs and	FETs (A	pply le	vel)						
10		CO5		the equ	uivalen	t small :	signal lo	ow freq	uency r	nodels	of BJTs	and FETS	in ampl	ifier ana	lysis (An	alyze
20PC2101	EDC		level)	T	T	ı	1	T	1	T	1	I	I	1	1	1
OPC	E		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
7		CO1	-	3	-	-	-	-	-	-	-	-	-	-	-	2
		CO2	2	2	-	-	-	-	-	-	-	-	-	-	-	2
		CO3	-	3	-	-	-	-	-	-	-	-	-	-	-	3
		CO4	-	3	_	-		-	-	-	-	-	-	-		2
		CO5	2	-	-	-	-	-	-	-	-	-	-	-		2
0		CO1	The st	tudent v	will be a	able to	underst	and var	ious typ	es of si	gnals n	nathemat	ically an	d able to	calculate	•
21	S&S		comp	lex Fou	rier spe	ectrum.	(Under	stand, (Calculat	e)						
20PC210	S	CO2													and App	
Ñ			sampl	ing the	orem to	conve	t contir	nuous-ti	me sigi	als to c	liscrete	-time sig	nal and r	econstru	ct the ori	ginal



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			oi 1	fno	0 mars 1 a -	(A 1_	ra A	n1)								
		CO3			_		se, App		and dat	ormino	tho roo	noncoo	f I TI cyct	om Und	erstand t	ho
		COS		-								-	-		member	
				stand)	olution	, correi	מנוטוו, פ	nergy s	респа	uensit	y and p	ower spe	ctrar der	isity. (Re	member	,
		CO4	Comp	ute Lap	lace tra	nsform	is to an	alyze co	ntinuo	us time	signals	and syst	ems and	underst	and the	
					_		_	(Comp	-							
		CO5							time sig	gnals an	d syste	ms, and	understa	nd the c	oncept of	f
							mpute)					2010				
		604	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	3	2	-	-	-	-	-	-	-	-	-	-	3
		CO2 CO3	3	3	3	-	-	-	-	-	-	-	-	-	-	3
		CO3	3	2	2	-	-	-	_	-	-	-	-	_	-	3
		CO5	3	2	2	_	_	_	_	_	_	_	_	-	_	3
		CO1	-			og and	digital s	eveteme		nositio	nal nota				mputer c	
		601		_		_	_	rstand,		•	nai nou	ttions, no	illioer sy.	stems, ec	inputer c	oues III
	ign	CO2									design	logic circ	cuits. (Ur	nderstand	l, Apply,	
	Digital Circuits and Logic Design		Analy	ze and	valuate)			•	•			•			
	gic I	CO3					_		_					s using e	ncoders,	
)3	Log							_				uate, and				
20PC2103	nd	CO4										lerstand,	Apply, A	nalyze)		
ЭРС	ts a	CO5	·					uits. (Ap					I	T =	l	T
7(cui	604	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	Cil	CO1	3	2	2	-	-	-	-	-	-	1	-	-	-	3
	gita	CO2 CO3	3	2	2	-	-	_	-	-	-	1	-	-	-	3
	Dig	CO3	3	2	2	-	-	-	-	-	-	1	-	-	-	3
		CO5	3	2	2	_	_	_	_	_	_	1	-	-	_	3
		CO1	-	_	_	lel the r	andom	nhenon	nena ar	d solve	simple	_	istic pro	hlems (I	nderstan	
		601	Apply		ily illoc	ici tiic i	andom	phenon	iiciia ai	iu 501 v C	simple	probabli	iistic pro	oiciis.(C	nacistan	u,
		CO2			rent typ	oes of ra	andom	variable	es and c	ompute	statisti	cal avera	iges of th	ese rand	om	
			variab	les.(Ar	alyse,	Apply,	Compu	te)		•						
		CO3	Learn	how to	deal w	ith mul	tiple ra	ndom v	ariable	s, condi	tional p	robabilit	y and co	nditiona	l expecta	tion,
_			, ,									Analyse, <i>i</i>	<u> </u>			
113	ے	CO4												Jndersta		
20BS2113	RVSP	CO5								to Cons	truct a	nd analys	se the ma	athemati	cal mode	elling of
20	_							oly, Con		DOG	DOO	DO10	DO11	DO12	DCO1	DCO2
		CO1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO2	3	2	3	-				-	-	1	_	-	_	3
		CO3	3	2	3	_	-	_	_	_	_	1	_	_	_	3
		CO4	3	2	2	-	-	-	-	_	-	1	-	-	-	3
		CO5	3	2	2	-	-	-	-	-	-	1	-	-	-	3
]		1 - 1		<u> </u>	<u>I</u>	L	<u>I</u>	<u>I</u>	1	L	ı	1	1	1	
C		CO1	Under	stand p	hilosop	hy of I	ndian c	ulture a	nd civi	ization						
20MC	EITK	CO2	Distin	guish t	he India	an langi	iages ai	nd litera	iture an	nong di	fference	e traditio	ns.			
2(ш	CO3	Learn	the phi	losoph	y of and	cient, m	edieval	and mo	odern Ir	ndia					
	_	_	_					_		_	_					



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		CO4	Acqu	<u>ire t</u> he i	nforma	tion abo	out the	fine arts	in Indi	ia						
		CO5	To kn	ow the	contrib	oution o	f scient	ists of o	differen	t eras.						
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	-	-	-	-	-	-	2	2	2	-	-	-	-	-
		CO2	-	-	-	-	-	-	1	2	-	-	-	-	-	-
		CO3	-	-	-	-	-	-	2	1	-	-	-	-	-	-
		CO4	-	-	-	-	-	-	3	3	3	-	-	-	-	-
		CO5	-	-	-	-	-	-	3	3	3	-	-	-	-	-
		CO1	Mea	sure vo	oltage,	freque	ncy an	d phase	of any	y wave	form u	sing CR	O.(Und	erstand)	
		CO2							wavef	orms v	with re	quired f	requenc	y and a	mplitude	•
				ng func												
	ab	CO3	Ana	lyze th	e chara	acterist	ics of	differe	nt elec	tronic	device	s such a	s diodes	s, transis	stors	
	ts La		etc.	(Apply	7)											
	ircui	CO4	App	ly the	diode	workir	ig prin	ciples	to des	ign sin	nple ci	rcuits li	ke recti	fiers, po	ower	
14	d Ci		supp	olies an	d ampl	lifiers e	etc. (A _]	pply)								
20PC2104L	Electronic Devices and Circuits Lab	CO5	Desi	ign the	BJT a	mplifie	r circu	it for th	ne give	n opera	ating co	ondition	s and sp	ecificati	ons.	
PC	vice		(Ap	ply)												
70	De															
	onic		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	ectr	CO1	3	2												2
	Ш	CO2	3	2												2
		CO3	3	2												2
		CO4	3	3												3
		CO5	3	3												2
		CO1	Creat	e and ev	valuate	signals	using N	MATLA	B							
		CO2						formati								
		CO3						designs			Transf	orms				
		CO4						g and sy								
.05L	q	CO5	Apply	y convo	lution a	nd filte	ring tec	hnique	s profic	iently						
20PC21	SS Lak		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
0P(SS	CO1	3	-	-	-	3	-	-	-	-	2	-	-	3	2
7		CO2	3	_	_	2	-	_	1	_	-	-	_	_	3	1
		CO3	3	-	2	-	-	_	-	-	-	-	1	-	3	2
		CO4	3	-	_	2	-	_	-	-	-	-	-	2	3	1
		CO5	3	-	2	2	-	_	-	-	-	-	-	-	2	2
		1	I.	1	1	1	1	1	1	1	1	1	1	1		
		CO1	Unde	rstand	digital	logic pi	inciple	s and lo	gic gat	e operat	tions, va	alidate th	rough ex	periment	ts.	
9	q	CO2													using a I	Digital
10	La			er Kit.		υ			,			1	,	,	C	υ
20PC2106L	DCLD Lab	CO3	Analy	y ze and	verify	decode	r and de	e-multip	lexer c	ircuits,	showca	sing pro	ficiency	and appli	cations.	
201	۵	CO4	Desig	n seque	ential lo	gic circ	uits, in	cluding	various	s flip-fl	ops, and	d work w	ith seque	ential dig	ital syste	ms.
		CO5	Const	ruct an	d analyz	ze coun	ters and	d other o	digital c	circuits,	highlig	thting pra	actical ap	plication	s in digit	al
		•	•		-											



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			electr	onics					er a rought a rought	200000000000000000000000000000000000000			CE 11-70			
			1 010011	J111 - D.												
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	-	-	3	-	-	-	-	-	-	2	3	1
		CO2	3	-	3	-	3	-	-	-	-	-	2		3	2
		CO3	3	3	2	-	-	-	1	-	_	-	-	-	2	2
		CO4	3	-	3	-	3	-	-	-	2	-	-	-	3	2
		CO5	3	3	3	-	-	-	1	-	-	-	-	-	3	2
		I.	L	1					I			l	I.	l	l	
		CO1	Dome	netroto	V novel	odgo of	Duthor	Funda	montolo							
		CO2									rocoss	lorgo dot	acote in	oludina n	erformin	a orrow
		CO2						haping (DIOCESS	iai ge uai	ascis, iii	riuumg p		gairay
		CO3									lection	aggrega	tion me	raina an	d data cle	eaning
		603		al-world			periori	II tasks	sucii as	uata se	icction,	aggrega	tion, mei	iging, an	u uata Cit	annig
		CO4					and de	sion so	ftware	solution	s usino	OOP pri	inciples			
		CO5										using Pyt		rammin	σ.	
20SC2101	Д.		1 11101)	20 proc	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-8011011	,	p.1011			<i></i>	21011 1102	<u>,- w</u>	<u>5.</u>	
SC2	DPVP		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
200	_	CO1	3	-	2	-		-	-	-	_	-	-	-	2	2
		CO2	2	_	2	_	2	_	_	_	_	-	-	_	2	2
		CO3	2	_	2	_	2	_	_	_	_	-	-	-	2	2
		CO4	2	3	2	_	2	_	_	_	_	-	-	_	2	2
		CO5				_		_	_	_	_	-	-	_		
			2	3	3		3								2	2
									-							
			Anals	ze the	RC circ	uits for	low na			s filter	ing and	design c	linners a	nd clamr	pers for v	arious
				cations(low pa	ss and i	ngn pa	35 THECT	ing and	design e	пррего а	na cianq	ocision v	arrous
		CO1	аррис	(-,										
		CO2	Apply	v and A	nalvze	various	amplifi	ier circi	iits usir	o BIT	and MC	SFET at	high fre	equencies	and mul	tistage
		552		fiers.(A	•		•		6511	-0 -01				-10.0100		
		CO3						k in amı	olifiers	and ana	alysis of	differen	t types o	f feedba	ck	
				fiers.(Fa							•					
	Ŋ	CO4		•			•	of oscil	lator ci	rcuits.(Analyze	<u>:)</u>				
7	Analog Circuits	CO5	Unde	rstand o	differen	t types	of pow	er amp	lifiers a	nd perf	orm an	alysis of	single tu	ned		
20PC2207	Circ		circuit	ts.(Und	erstand	, Analy	ze)									
PC	og			•												
20	nal		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	A	CO1	2	3	-	-	-	-	-	-	-	-	-	-	2	2
		CO2	2	3	2	-	-	-	-	-	-	-	-	-	2	2
		CO3	2	3	3	-	-	-	-	-	-	-	-	-	2	3
		CO4	2	2	-	-	-	-	-	-	-	-	-	-	2	3
		CO5	1	2	-	-	-	-	-	-	-	-		-	2	2
1		I		1								1				



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								1				red Departin				
		CO1	Use tl	he conc	epts of	vectors	and sp	ace coo	rdinate	s to solv	ve the fi	undamen	tal probl	ems of st	atic elect	tric
	les		fields													
	(a)	CO2	Apply	v princi	nles of	static el	lectric f	ield to 1	ındersta	and the	hehavio	our of die	electrics	and cond	uctors	
	>										o cha vic	our or une	- Icetifes (una coma	actors	
	Pu	CO3						y magn								
	Electromagnetic Fields and Waves	CO4	Solve	the Ma	xwell's	equation	ons of T	ime Va	ying fie	elds and	d obtain	the wav	re pheno	menon i	n various	media.
20PC2208	9	CO5	Analy	ze wave	propa	gation (charact	eristics	and po	wer tra	nsporta	ition phe	nomeno	n.		
5	Fie										•	•				
PC	. <u>:</u>		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	DO11	DO12	PSO1	PSO2
20	Jet				PU3	PU4	PU3	PU6		PU6	PU9	PO10	PO11	PO12		ļ
	lge lge	CO1	3	2	-	-	-	-	2	-	-	-	-	-	3	2
	Ë	CO2	3	2	-	-	-	-	2	-	-	-	-	-	3	2
	5	CO3	3	2	-	-	-	-	2	-	-	-	-	-	3	2
	ec	CO4	3	2	_	_	_	_	2	_	_	_	_	_	3	2
	ᇳ		3	-												
		CO5		1		-		<u> </u>	2				<u> </u>		3	1
	ب	CO1						_				istics of	varıous d	ıgıtal log	ic famili	es.
	무	CO2	Study	ing bas	ics of H	IDL and	d Progr	amming	model	s of VI	HDL.					
	Digital System Design with VHDL	CO3		mentin												
	ᇋ	CO4						ogic usi	ag ICc a	nd VUC) codo					
	3										or code					
60	gu	CO5	Mode	ling of	Sequen	tial circ	uits usi	ng ICs a	nd VHL)L code						
20PC2209	esi															
S	٥		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
20	eπ	CO1	_	2	_	3	2	_	_	_	_	_	_	_	_	3
	/st	CO2	2			3	3	_							2	
	S			-	-					-	-	-	-	-		-
	ţa	CO3	2	-	-	3	3	-	-	-	-	-	-	2	2	-
	igi	CO4	3	-	-	3	3	-	-	-	-	-	-	-	3	-
		CO5	3	-	-	3	3	-	-	-	-	-	-	-	3	-
		CO1	Imple	ement v	arious	peration	ons on 1	inear lis	ts.	•	•	•	•	•	•	
		CO2				•				uec for	evnlori	ing comm	lev data	structure	ic.	
														suuctuic	· · · · · · · · · · · · · · · · · · ·	
		CO3	·									structure				
	es	CO4										trees, bi	nary sea	rch trees	•	
1	Structures	CO5	Identi	fy appr	opriate	data st	ructure	algorit	hms fo	r graphs	S					
OE2201	딜															
)E)ţr		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
200		CO1	-			-			107	1 00	103	1010	1011	1012		
, ,	Data	CO1	2	2	1		-	-	_		<u> </u>	_		-	1	1
		CO2	1	2	2	-	-	-	-	-	-	-	-	-	2	1
		CO3	1		2	2	-		_						2	1
		CO4	2	-	2	1	-	-	-	-	-	-	-	-	1	1
		CO5	_	2	1	2	_	_	-	_	_	_	_	_	1	1
	1	CO1	Under				open 1	on and	closed	100n ar	etame :	nathama	tical ma	dels of m	echanica	
		COI														
				•		•				ct the ii	iatnema	mear mo	del of a s	system ar	nd Apply	
	۳s							verall s								
6	Ę.	CO2					n analyz	zing the	system	respon	ise in tii	ne-doma	in, in ter	ms of va	rious	
52() sys			rmance												
20ES2209	Control Systems	CO3	Analy	ze the s	ystem i	n term	s of abs	olute st	ability	and rela	ative sta	ability by	differen	t approa	ches.	·
20	ıtı	CO4													s of vario	us
	Į			rmance	-		anary	6	2,500			. 2442110	,			
		665					£ •		1:		A.1	l ·	l £	'		
		CO5													nain anal	
1	1		per gi	ven spe	ecification	ons. De	termine	e tne co	ntrollal	oility an	id obsei	rvability	of the co	ntrol sys	tem usin	g tne
	•															



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			conce	pts of s	tate vai	riable a	nalysis.									
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	-	-	-	-	-	-	-	-	-	-	-	-
	•	CO2	-	2	-	_	-	-	_	_	-	-	_	-	-	-
		CO3	3	-	3	-	-	-	_	_	_	-	_	2	-	_
		CO4	-	-	-	_	2	_	_	-	_	-	-	-	-	-
	•	CO5	3	-	3	-	2	_	_	_	_	_	_	2	_	_
		CO1		n and		he one		of RC	Circuit	as dif	ferent i	ator and	integrat		<u> </u>	
		CO2						per and				ator una	megrae	01.		
		002	Office	istana	the ope	ration	or enp	per and	Clairi	ocis cii	cuits.					
	ap	CO3	Calcu	late the	e bandy	width a	of com	mon en	nitter.	commo	n sour	ce and ty	wo stage	e RC coi	ıpled an	nplifier
_	SL	CO4		n LC a							11 50 41	oc ana t	no stage	7110 001	aprou un	рине
211	ij	CO5						ampli	fier wi	th and	withou	t feedba	ıck			
7	ä		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
20PC2211L	Analog Circuits Lab	CO1	2	2	3	-	3	-			3	-	-	2	3	2
,	nal	CO2	2	2	3		3	_	_	_	3	_	_	2	2	2
	Ā	CO3	2	2	3	_	3	_	_		3	-	-	2	3	3
		CO4	2	2	3	-	3	-		_	3	_	_	2	2	2
		CO5	2	2	3	-	3	_	_	_	3	_	_	2	2	2
		CO1		_		-		are plat	forms	to the			-			
												.5				
		CO2						urpose				4 1 .				
		CO3										ng tools		1 1 6		
		CO4						d digita	I senso	ors whi	ch are	basic bu	ilding b	locks for	r any	
2	(C)			ctive s				. D	3D 1							
2	SO	CO5		miliari:				pasic Po					2011	2012	2004	5000
7				1 0111	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
SC2	TEE(PO1	FUZ											_	
20SC2202	онее(soc)	CO1	PO1 2	-	-	-	-	_	-	-	2	2	_	-	3	3
20SC2	ОНЕЕ(2	-	-	-	-	_	-	-			_	-		
20SC2	ОНЕЕ(CO2	2	-	2	-	-	-	-	-	2	2	-	-	3	3
20SC2	ОНЕЕ(CO2 CO3	2 3 2	-	3	-	-	-	-	-	2 2	2 2	-	-	3	3
20SC2	ОНЕЕ(CO2 CO3 CO4	2 3 2 2	-	3		-	-	-		2 2 2	2 2 2	-	-	3 3 3	3 3 3
20SC2	ОНЕЕ	CO2 CO3 CO4 CO5	2 3 2 2 2		3 2 2	-			-	- - -	2 2 2 2	2 2 2 2	- - -	- - -	3 3 3	3 3 3 3
20SC2		CO2 CO3 CO4	2 3 2 2 2 Under	- - - - - rstand t	3 2 2 he basic	- - es of HI	- - - DL and	- - Apply	- - - differer	- - - nt progr	2 2 2 2 ammin	2 2 2 2 g approad	- - ches for o	- - - obtaining	3 3 3 3 digital I	3 3 3 3 Logic
208C2		CO2 CO3 CO4 CO5	2 3 2 2 2 Under Gates	- - - - rstand the	3 2 2 he basic	- - es of HI	- - - DL and	- - Apply	- - - differer	- - - nt progr	2 2 2 2 ammin	2 2 2 2 g approad	- - ches for o	- - - obtaining	3 3 3	3 3 3 3 Logic
208C2		CO2 CO3 CO4 CO5	2 2 2 2 Under Gates result	- - - - rstand to	2 2 he basic l adder	- - cs of HI Perfor	- - - DL and rm simu	- - Apply lation a	- - differen	- - nt progr	2 2 2 2 ammin	2 2 2 2 g approac	- - ches for os and also	- - - obtaining o analyze	3 3 3 3 digital I	3 3 3 cogic hesis
208C2		CO2 CO3 CO4 CO5	2 2 2 2 Under Gates result Apply	- - - - rstand to and ful	3 2 2 he basic ll adder	- - es of HI , Perfor	- - DL and rm simu	- - - Apply a lation a	- - differend veri	- - nt progr fy the lo	2 2 2 2 2 amming ogical o	2 2 2 2 g approace perations	ches for os and also	- - - obtaining o analyze	3 3 3 3 digital I	3 3 3 cogic hesis
		CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula	- - - - rstand th and ful progra	3 2 2 he basical adders	- - cs of HI Perfor approa	- - DL and rm simu ach usin gical op	- - - Apply lation a	- - differenderind veri L for design and a	- - nt progr fy the lo evelopi lso anal	2 2 2 ammingogical of	2 2 2 2 g approace perations oder, ence	ches for os and also oder and s result.	- - - obtaining o analyze	3 3 3 g digital I te the synt	3 3 3 Cogic hesis
		CO2 CO3 CO4 CO5	2 2 2 2 Under Gates result Apply simula	- - - - rstand the and full progra ation ar	3 2 2 he basic il adder, imming nd verif	- es of HI , Perfor approay the lo	- - DL and rm simu ach usin gical op r higher	- - Apply lation a	differend veri L for des and a	- - nt progr fy the lo evelopi lso anal	2 2 2 ammingogical of	2 2 2 2 g approace perations oder, ence	ches for os and also oder and s result.	- - - obtaining o analyze	3 3 3 3 digital I	3 3 3 Cogic hesis
		CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula Write opera	- - - - rstand th and ful progra ation ar VHDL S	3 2 he basical addersorming of verify source of also	es of HI Perfor approay the lo	DL and am simulation of the system of the sy	- Apply alation a service of the ser	differend veri L for des and accomparesult.	- - nt progr fy the lo evelopi lso anal	2 2 2 2 amming ogical of	2 2 2 2 g approace perations oder, enco	ches for os and also oder and s result.	- - - obtaining o analyze multiple on and v	3 3 3 g digital I te the synt	3 3 3 Cogic hesis
20PC2202L 20SC2		CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula Write opera		3 2 2 he basical adderse ad verify source on also agramm	es of HI Perfor approa y the lo code for analyze	DL and on simulation with using gical or higher the sylproach	- Apply alation and service of the sister of	differer nd veri L for d s and a comparesult.	- - nt progr fy the lo evelopi lso anal rator an	2 2 2 2 ammin ogical o	2 2 2 2 g approace perations oder, enco	ches for os and also oder and s result. simulation	- - - obtaining o analyze multiple on and v	3 3 3 3 g digital I e the synt	3 3 3 Cogic hesis
		CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula Write opera Use Visimula		3 2 he basical adders amming ad verify source of the dalso of the dals	es of HI perfor approay the lo code for analyze ning app	DL and ch usin gical op the synoroach gical op	Apply a lation a lati	differend verind verind vering and a comparesult.		2 2 2 amming ogical of ogical of ogical of open decorptions of the open decorp	2 2 2 g approaches synthesis Perform	ches for os and also oder and s result. simulations is result.	- - - - - - - - - - - - - - - - - - -	3 3 3 3 g digital I e the synt	3 3 3 Cogic hesis orm logical
		CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula Write opera Use V simula Design		3 2 he basical adders amming ad verify fource of also a peramment verify ent Courter to the cour	es of HI Perfor approay the locode for analyzening apply the locode nters a	DL and ch using gical oper the sylproach oper gical oper nd shift	Apply a lation a lati	differend veri L for design and accompanies ac	- - nt progr fy the lo evelopi lso ana rator an Flip Flo lso ana ters usi	2 2 2 amming ogical of the last of the las	2 2 2 2 g approace synthesis Perform e synthese L Source	ches for os and also oder and s result. simulations is result.	- - - - - - - - - - - - - - - - - - -	3 3 3 3 digital I e the synteethe sy	3 3 3 Cogic hesis orm logical
		CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula Write opera Use V simula Design		3 2 he basical adders amming ad verify fource of also a peramment verify ent Courter to the cour	es of HI Perfor approay the locode for analyzening apply the locode nters a	DL and ch using gical oper the sylproach oper gical oper nd shift	Apply alation a service of the six of the si	differend veri L for design and accompanies ac	- - nt progr fy the lo evelopi lso ana rator an Flip Flo lso ana ters usi	2 2 2 amming ogical of the last of the las	2 2 2 2 g approace synthesis Perform e synthese L Source	ches for os and also oder and s result. simulations is result.	- - - - - - - - - - - - - - - - - - -	3 3 3 3 digital I e the synteethe sy	3 3 3 Cogic hesis orm logical
	Digital System Design with VHDL Lab	CO2 CO3 CO4 CO5 CO1	2 2 2 Under Gates result Apply simula Write opera Use V simula Design verify		3 2 he basical adderstand verify source of also orgrammed verify ent Coulcial open	- cs of HI Perfor approay the locode for analyze ning app the locotes analyze ning app	DL and on simulation with using gical operated by the sylphotoach operated by the shift of and allowed by the shift of the	Apply alation and service of the sister of t	differend veri L for done so and a comparesult. eloping as and a cer countyze the	- - nt progr fy the lo evelopi lso anal rator an Flip Flo lso ana ters usi synthes	2 2 2 ammingogical of the control of	2 2 2 2 g approace perations oder, encore synthesis Perform isters and experiments L Source lt.	ches for os and also oder and s result. simulation is result. code, Pe		3 3 3 g digital I e the syntexer, Performance the syntexer, Performance the syntexer is a syntexer in the syntexer.	3 3 3 3 Cogic hesis orm logical



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				I	T			Market Control	reuneu an				12-11-20			
		CO3	1	-	-	3	3	-	-	-	-	-	-	-	3	3
		CO4	1	-	-	3	3	-	-	-	-	-	-	-	3	3
		CO5	1	-	-	3	3	-	-	-	-	-	-	-	3	3
									III-I							
		CO1						is of Di d level,		al Amp	olifier, a	nd perfo	rmance p	arameter	s of OP-	Amp
		CO2								ng on-a	mp. {A	pply lev	el. KL3}			
	JS	CO3												lysis, KL4	1}	
	Ē	CO4												nd level,		
12	ica	CO5						•						evel, KL3		
20PC3112	Applications	003	CONSC	. ruct tric	variou	is Digitt	ii to Aii	alog all	a Allaio	g to Dig	sitai coi	iverters.	(Apply II	cvci, KLS	<u>J•</u>	
OP	2		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
7	Linear IC	CO1	3	2	-	-	-	-	-	-	-	-	-	-	2	-
	ine	CO2	-	3	-	2	-	_	_	_	-	_	-	-	2	-
		CO3	2	3	-	-	-	-	-	-	-	-	-	-	3	-
		CO4	2	_	_	3	_	_	-	-	_	-	-	_	3	_
		CO5	2	_	_	2	_	_	_	_	_	_	_	_	2	_
					1											
		CO1						knowle lationsl		estima	ting the	Deman	d and de	mand el	asticity's	s for a
		CO2		Learner nowleds					he natu	ire of d	lifferen	t markets	s and als	o to have	e	
		CO3	The L	Learner	will ac	quire tl	he knov	vledge	on mar	ageme	nt, HR	M and M	Iarketing	ζ.		
04		CO4		earner gement		quire tl	he knov	wledge	to prep	are Fin	ancial	Statemer	nts and th	he techni	iques of	project
20HS3104	EEM	CO5	The I	Learner	can ab			various 1 makin		ment p	roject p	roposals	with the	e help of	capital	
,,,			_													
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	1	1	-	-	-	-	1	-	1	1	2	-	-	1
		CO2	1	2	-	-	-	1	1	-	1	-	2	-	-	1
		CO3	-	-	-	-	-	1	1	1	1	1	2	-	-	1
		CO4	1	2	-	3	-	-	1	-	1	2	2	-	-	1
		CO5	1	2	-	3	-	-	1	1	1	2	2	-	-	1
		l	1		1		1	1	ı	ı		l				
		CO1						dulation		emodul	ation sc	hemes ar	nd Under	stand var	rious fun	ctional
κį		CO2	Distin	nguish v	various	Angle 1	modula		demod			es and C	ompare t	he perfo	rmance o	f AM,
20PC3113	ADC	CO3	Descr	ibe the	genera	tion an	d detec		base ba	nd syst	em and		ine the p	erforma	nce of lir	ie
20		CO4											e (Evalua	ting)		
		CO5									_	nes for to alyzing)	he reliab	le transn	nission of	f digital
1			•		-						-					



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		1											55-10-50				
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
		CO1	3	2	2	-	-	-	1	-	-	-	-	-	-	-	
		CO2	3	2	1	-	-	-	1	-	-	-	-	-	-	-	
		CO3	3	2	2	-	-	-	1	-	-	-	-	-	-	-	
		CO4	3	2	2	-	-	-	1	-	-	-	-	-	-	-	
		CO5	3	2	1	-	-	-	1	-	-	-	-	-	-	-	
		CO1	.{App	olying le	evel, K	L3}								•	nd process		
		CO2		onstrate neir mir							S devic	es to det	ermine th	ne delays	of the ci	rcuits	
		CO3	Elabo	rate the	opera	tion of I	MOS cir	cuits to	design	the sin	gle-sta	ge amplif	fiers {Cre	ating lev	el, KL6}		
4	gn	CO4 Analyze the static and dynamic CMOS design aspects to develop combinational and sequential circuits {Analyzing level, KL4} CO5 Understand the architectural aspects of CPLD and FPGA, and several advanced technologies. {															
20PC3114	l Design	CO5	{Analyzing level, KL4}														
20	VLSI																
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
		CO1	2	-	2	-	2	-	-	-	-	-	-	-	-	-	
		CO2	3	2	2	1	-	-	-	-	-	-	-	-	-	-	
		CO3	3	2	2	1	-	-	-	-	-	-	-	-	-	-	
		CO4	3	2	2	1	-	-	-	-	-	ı	-	-	-	-	
		CO5	3	2	-	-	2	-	-	-	-	-	-	-	-	-	
		CO1	Able	to realiz	ze the c	oncept	of Obj	ect Ori	ented F	rogran	nming &	& Java P	rogramn	ning, Ar	rays		
		CO2		to descr eration					va such	as ope	erators,	classes,	objects,	inheritai	nce, pack	ages,	
	⋖	CO3							and In	put/ Ou	ıtput or	erations	1				
	Through JAVA	CO4		to desig													
102	gh.	CO5									ing and	Abstrac	t Windo	w Toolk	it		
.00E3102	Jon O.				-			-									
00	車		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
7	OOPS	CO1	-	2	1	1		-	-	-	-	-	-	-	1	1	
	00	CO2	-	2	2	2	1	-	-	-	-	-	-	-	2	1	
		CO3	-	2	2	2	1	-	-	-	-	-	-	-	2	2	
		CO4	-	2	2	2	1	-	-	-	-	-	-	-	2	1	
		CO5	-	2	2	2	2	-	-	-	-	-	-	-	2	1	



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			1				-									
		CO1						o syster								
		CO2						and the								
	Jce	CO3					•					•	apply co	onservati	ion practi	ces.
	cie	CO4						of the				pacts				
103	al S	CO5	Under	rstand s	ocial is	sues bo	th rura	l and ur	ban en	vironm	ent					
C3	ent		DO1	DO2	DO2	DO4	DOF	DOC	DO7	DOG	DOO	DO10	DO11	DO12	DCO1	DCO2
20MC3103	Environmental Science	CO1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
7	io	CO1	3	-	3	-	2	-	3	-	3	-	3	2	-	-
	'n	CO2	3	-	3	-	2	-	3	-	2	-	3	3	-	-
	ш	CO4	2	_	3	-	2	-	3	_	2	-	3	3	-	-
		CO5	3	_	1	_	3	-	3	_	3	_	3	2	_	-
		003		_					3			_				_
		CO1	Under	rstand t	he basic	Mathe	ematical	operati	ions of	Operati	onal A	mplifier				
		CO2										прине				
	q	CO3	Understand the basic Mathematical operations of Operational Amplifier Design and Observe the frequency response of Active Filters Measure the theoretical and practical frequency of oscillators using Operational Amplifier. Construct different Waveform Generators using Operational Amplifier and 555 Timer & Investigate different Voltage Regulators IC's Develop different Analog -Digital Converters and Digital – Analog Converters													
	s La	CO4														
	ion															
.16	cat	CO5	Devel	op diff	erent A	nalog -	Digital	Conver	ters and	l Digita	l – Ana	log Conv	erters			
20PC3116	Linear IC Applications Lab															
20P	Z A		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
,,	ır (CO1	3	-	-	-	-	_	-	-	-	-	-	-		
	nea	CO2	2	-	-	-	-	-	-	-	-	-	-	-		
	:=	CO3	3	3	-	3	-	-	-	-	-	-	-	-		
		CO4	2	3	-	3	-	-	-	-	-	-	-	-		
		CO5	2	3	-	3	-	-	-	-	-	-	-	-		
		601	A 1	4:6	Fa	A	an o duri	امدنمه ()_ da	الماملا	- 4 - ala					
		CO1										niques				
		CO2				_		g modu								
		CO3						digital					-:	مانيا مانيا	. 4	
		CO4	1												techniq	ues.
7	q	CO5			IATLAB	simuli	nk mo	dels to	impler	nent v	arious	analog &	k digital	modula	tion	
311	La		techn	iques.												
20PC3117L	ADC Lab		DO4	DO3	DO3	DC 4	חסר	DOC	DO7	DOO	DO0	DO10	DO11	DO43	DCO4	DCC2
20	1	CO1	PO1 3	PO2 2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	_	-	1	_	_		-	_	_		2 2	2 2
		CO2	3	2		-	1	-	_	-	_	_			2	2
		CO4	3	2	_	_	1	_	_	_	_	_	_	_	2	2
		CO5	3	2	-	_	1	-	_	_	_	_	_	_	2	2
					<u>l</u>	<u>l</u>		l	l .	1	I	<u>I</u>	1	1		



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		110070150		nes storios (CSA)				All Control of the Control	Parameter and the second	A DANGE OF PRINCE		red Departm	17-14-72			
		CO1	Deve	lop VH	DL sou	rce cod	e, Perfo	rm sim	ulation	using re	elevant	simulato	r			
		CO2	Analy	ze the	simulati	on resu	lts usin	g neces	sary sy	nthesize	er					
		CO3	Imple	ement co	ombina	tional a	nd sequ	ential c	ircuit d	esigns	on FPG	A board				
	q	CO4										ng mento	r graphic	cs.		
یر	Lal	CO5						ircuits a				8	<i>8</i> · I			
20PC3116L	gn				, 0000 101		282001									
3	esi		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
OP		CO1	-	102	2	3	3	-	-	100	-	-	-	1012	3	2
7	VLSI Design La	CO2				3	3	_		_	_		_		2	3
		CO ₂	-	-	3	3	3		-			-		_	2	3
			-	-				-	-	-	-	-	-	-		
		CO4	-	-	3	-	3	-	-	-	-	-	-	-	3	2
		CO5	-	-	3	-	3	-	-	-	-	-	-	-	3	3
		CO1					of both	written	and o	ral com	munica	ition skill	s that ar	e impera	tive for a	any
				ssional												
		CO2	Confid	dently a	ace diffe	erent co	mpetiti	ve exar	ns and	develo	p writir	ng skills				
		CO3	Able t	to enha	nce ora	al comn	nunicati	ion ove	rcomin	g stage	fright					
	C-1	CO4	Gain	awaren	ess of t	he indu	stry ex	pectation	ons and	draft C	CV / Ré	sumé in	lieu with	desired	job profil	es
.03	Soft Skilla(SAC-1)	CO5	Crack	behavi	oral (H	R) inter	view co	nfidentl	y and e	xhibit p	rofessio	nal pers	ona	<u> </u>	<u> </u>	
20SC3103	lla(ĺ						i i				
08(Skil		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
2	ft (CO1	-	-	-	-	-	-	-	-	-	3	-	-	-	-
	So	CO2	_	_	_	_	_	_	_	_	_	3	_	_	_	_
		CO ₃	 	 	_			_	_	_	_	3	_	3	_	<u> </u>
		CO4			_				_	_	_	_	_	3		
		CO ₄	-	-	-	-	-	-	-	-	-	-	-	2	-	-
		CO3	_	_	-	-	-	-	-	-	-	-	-		-	-
		CO1							1							
		CO1										nciples le	earned ir	i their ac	ademic	
		000										ernship.				
		CO2			-		•						•		vant to t	
															ent solut	
		CO3	The in	itern w	ill enha	nce the	ir comn	nunicat	ion and	collab	oration	skills by	interacti	ng with o	colleague	!S,
	C		super	visors, a	and clie	nts, cor	ntributii	ng effec	tively t	o team	project	s and cle	arly con	veying id	eas and	
	Summer Internship		inforn	nation.												
1	rns	CO4	The in	itern wi	II demo	nstrate	adapta	ability a	nd flexi	bility in	dealing	g with ch	anging w	ork envi	ronment	:S,
310	ıte		tasks,	and un	foresee	n chall	enges, s	showcas	sing the	ability	to lear	n and adj	ust quicl	kly.		•
2 0PR3101	ı	CO5										hics, wor			and the	
20	me						-					ring thei	•			
	Ę		po.	turioc c	, admen		ina asti y	эрсон	00000	01 0011				р.		
	Sı		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	2	1 04	103	1 00	10/	1 00	103	1010	1011	1 012	3	2
		CO2		3		2		_				_	2		2	3
			-	3	_		-	_	_	_	- 2	- 2	2	-		
		CO ₃	-	-	-	-	-	-	-	-	3	3	2	-	2	2
		CO4	-	-	-	-	-	2	-	-	-	-	2	3	2	2
		CO5	-	_	-	-	-	2	-	3	3	-	-	-	2	2



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								A. C.	er en die een die			red Departin				
		ı	T .						11-11			_				
		CO1	of Dis	screte ti	me syst	tems								_	in the an	•
		CO2								utation	of Disc	rete Four	rier Tran	sform &	Use the F	FT
							FT of a									
	ing	CO3					IR) fron	n the gi	ven spe	cification	ons					
	ess	CO4	1	o realiz												
81	roc	CO5						_	se the I	Multirat	te Proce	essing co	ncepts ir	n various	applicati	ons
20PC3218	Digital Signal Processing		&Lear	n the c	oncepts	of DSF	Proces	sors								
OPC	ign		DC1	DO3	DO3	DC 4	חסר	DOC	DO7	DO0	DOO	DO10	DO11	DO43	DCO1	DCC3
2	S JE	604	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
	gita	CO1	3	-	2	-	-	-	1	-	-	-	-	-	-	-
	Ō	CO2	3	-	1	-	-	-	1	-	-	-	-	-	-	-
		CO3	3	-	2	-	-	-	1	-	-	-	_	-	-	-
		CO4	3	-	1	-	-	-	1	-	-	_	-	 	-	-
		(03	3	_		_	_	_	1	_	_	_	_	_	_	-
		CO1	Unde	rstand t	he arch	itecture	of mici	roproce	ssor an	d their l	basic ha	rdware c	ompone	nts and o	peration.	1
				erstand												
		CO2	Demo	onstrate	progra	mming	skills ir	assem	oly lang	guage fo	or proce	essors. {	Analysis	level, KI	<u> 4</u> }	
		CO3	Analy	ze vario	us inte	rfacing	technic	lues an	apply	them fo	or the d	lesign of	processo	or {Analy	sis level,	KL4}
		CO4													KL1, KL2	}
20PC3219	10	CO5	Able t	o illustr	ate hov	w the d	ifferent	on ARN	/I Corte	x proce	essors a	nd debu <u>ք</u>	g. {Analy	zing leve	l, KL3}	
(3)	MPMC		_			,	_						_		_	
20F	2		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	2	-	-	-	1	-	-	-	-	-	-	-
		CO2	3	2	1	-	-	-	1	-	-	-	-	-	-	-
		CO3	3	2	2	-	-	-	1	-	-	-	-	-	-	-
		CO4	3	2	2	-	-	-	1	-	-	-	-	-	-	-
		CO5	1	2	3	-	-	-	3	-	-	-	-	-	-	-
		CO1					rectang									
		CO2					ious wa ation of						e microv	wave ene	ergy in a	
		CO3										l optical	fiber co	nnectors		
		CO4													ne opera	tions
							cal syst			341000		221015 10	. ,	o rour un	по ореги	
20	00	CO5								using a	a Micro	wave te	st bench	and opti	ical	
20PC3220	MW&OC		measu	ıremen	ts using	g block	diagra	m opera	ations.					1		
20P	Σ		T	1	Г	1		Г	Ī	1	1	T	1		 	1
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
		CO1	3	2	2	-	3	-	-	-	-	-	-	-	-	-
		CO2	2	3	-	-	2	-	-	-	-	-	-	-	-	-
		CO3	2	-	2	-	-	-	-	-	-	-	-	2	-	-
		CO4	-	-	3	2	2	-	-	-	-	-	-	-	-	-
		CO5	3	-	-	-	3	-	-	-	-	-	-	-	-	-
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		T == .	77 1	. 1	0 D		.1 C	-	1	Constitution of the contract o		c 1 ·	•	• •		1	
		CO1	_												ntennas .		
		CO2										antennas					
		CO3	Const of arr		e basic	array s	ystem i	n anter	nnas an	d Draw	the Ra	diation I	Mechani	sms for	different	types	
		CO4		ze the	operati	on of V	HF. U	HF and	Micro	wave A	ntenna	ıs.					
20PE3201	٦	CO5										radio w	ave pror	agation			
	AWP		100110				anospin-						w.v prop	- ugunon			
20F	1		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
		CO1	2	3	-	-	2	-	-	-	-	-	-	-	3	2	
		CO2	3	2	_	_	3	_	_	_	_	_	_	_	3	3	
		CO3	3		3	<u> </u>	_	_	_	_	_	_	_	2	2	3	
		CO4	-	_	2	3	3	-	_	_	_	_	_	-	2	3	
		CO5	2	_	_	3	-	_	_	_	_	_	_	2	3	2	
		003										_	_				
	, ,	1	T														
		CO1	Understand logical and arithmetic functions performed by 8086 and use them to implement processing activities Demonstrate the interfacing of I/O with 8086 for real-time applications. Develop assembly language programs to perform stack and code conversion operations														
		CO2															
		CO3													S		
_	q	CO4										s and arra					
21	La	CO5	Asses	ss the fu	ınction	al perfo	ormanc	e of AF	RM mic	roconti	rollers 1	using sin	nulators.				
20PC3221L	MPMC Lab																
0.	ΛΡΙ		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
7	_	CO1	3	-	-	-	-	-	-	-	-	-	-	3	3	2	
		CO2	-	-	3		3	2	-	-	-	-	-	3	3	3	
		CO3	-	-	3	3	3	-	-	-	-	-	-	3	3	3	
		CO4	-	-	-	-	2	-	-	-	-	-	-	3	2	3	
		CO5	3	-	3	3	3	-	-	-	-	-	-	3	3	3	
		CO1									metic o	perations	on sign	als and o	btain the		
				nse of tl													
	Lab	CO2										computat		_			
		CO3							function	ns and	design l	FIR, and	IIR filter	rs for ba	nd pass, l	band	
	sin			low pas													
31	Digital Signal Processing	CO4		ruct the													
20PC3223L	² ro	CO5	Under	rstand tl	he archi	tecture	of TMS	\$320C6	5713 DS	SP Proc	essors a	ind emplo	oy it for	real time	processi	ng.	
PC	alF		T		1	1		T		1	T	T	T	1			
20	ign		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
	al S	CO1	3	-	-	-	-	-	-	-	-	-	-	-	3	1	
	igit	CO2	3	-	-	-	-	-	-	-	-	-	-	-	2	3	
	٥	CO3	3	-	_	_	3	-	-	_	-	-	-	-	1	3	
		CO4	3	-	-	-	2	-	-	-	-	-	-	-	1	2	
		CO5	3	-	-	-	2	-	-	-	-	-	-	-	2	2	



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		CO1	Identi	fy and o	demons	trate the	e worki	ng of va	arious 1	nicrowa	ave Pas	sive com	ponents.			
		CO2	Analy	ze the c	haracte	ristics (of differ	rent mic	crowav	e source	es					
		CO3	Evalu	ate scat	tering p	aramet	ers of n	nicrowa	ve pass	ive con	nponent	s.				
		CO4	Analy	ze the c	haracte	ristics (of diffe	rent opt	ical sou	irces						
2L	MW&OC Lab	CO5	Evalu	ate vari	ous opt	ical fib	er parai	neters a	and ana	lyze an	optical	fiber con	nmunicat	tion link.		
20PC3222L	2															
PC	8		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
20	S	CO1	3	2	-	-	-	-	-	-	2	-	-	2	2	2
	_	CO2	3	3	-	-	-	-	-	-	2	-	-	2	2	2
		CO3	3	3	-	-	-	-	-	-	2	-	-	2	3	3
		CO4	3	3	-	-	-	-	-	-	2	-	-	2	2	3
		CO5	3	3	-	-	-	-	-	-	2	-	-	2	3	3
		CO1	To de	velop w	ebpage	S										
	_	CO2	To de	velop d	ynamic	webpa	ges usii	ng Java	script							
	C-2	CO3	To cre	eate DT	D's , X	ML sch	nemas		_							
	SA	CO4	To cre	eate wel	osites u	sing PF	łΡ									
4	nt(CO5	To de	velop w	ebsites	using I	Databas	ses								
320	me															
	ō		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
SC	<u> </u>		101	102												
20SC3204	svelo	CO1	-	-	2	-	2	-	-	-	-	-	-	-	2	2
20SC	Development(SAC-2)	CO1	-	-		-	2 2	-	-	-	-	-	2	-	2 -	2 -
20SC	/eb Develo		-	-	2	- - -						- - -			-	
20SC	Web Develo	CO2	-	-	2 2		2		_	-			2		-	
20SC	Web Develo	CO2 CO3	-	-	2 2		2	-	-	-	- - - -		2 2		-	
20SC	Web Develo	CO2 CO3 CO4	- - -	- - -	2 2	-	2 2	-		- -	- - -	-	2 2 -	-	- - -	- -
20SC	Web Develo	CO2 CO3 CO4	- - - 2	- - - 2	2 2 2	- 3	2 2 3	-			-	-	2 2 -	-	- - -	- -
2080	Web Develo	CO2 CO3 CO4 CO5	- - - - 2	- - - 2	2 2 2 - -	- 3	2 2 3 and proof	- - cess for	Value	- - - -	- - on.	-	2 2 - 2	-	- - -	- -
20SC	Web Develo	CO2 CO3 CO4 CO5	- - - - 2 Under Exten	- - - 2 estandin	2 2 2 - - g the co	- 3 ontent a in the h	2 2 3 and produman b	- - cess for being, fa	Value	- - - -	- - on.		2 2 - 2	-	- - -	- -
20SC	Web Develo	CO2 CO3 CO4 CO5	2 Under Exten Build	- - - 2 estandin d the ha	2 2 2 - - g the courmony	- 3 Ontent a in the hing of s	2 2 3 and produman to self-refl	cess for being, fa	- - - - Value o	- - - - education	on.	- - - ure/existe	2 2 - 2 2 ence		- - -	2
20SC	Web Develo	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	2 Under Exten Build Apply values	- - - 2 standin d the ha the Stree to All	2 2 2 - g the coarmony engthen levels b	ontent a in the ling of secome onship	2 2 3 and procuman beelf-refl sensitive	cess for being, faction.	Value of amily, seir committee;	- - - education society a	on. and natu	- - - ure/existe	2 2 - 2 ence	- - - - underste	- - 2	- - - 2
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3	2 Under Exten Build Apply values Devel	- - - 2 standin d the ha the Stre to All	2 2 2 - g the courmony engthen levels but n relation of a hor	ontent a in the hing of specome onship olistic p	2 2 3 and procuman beelf-reflusensitive and hur erspects	cess for being, faction.	Value of amily, seir committee;	- - - education society a	on. and natu	- - - ure/existe	2 2 - 2 ence	- - - - underste	2	- - - 2
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	2 Under Exten Build Apply values Devel	- - - 2 standin d the ha the Stree to All	2 2 2 - g the courmony engthen levels but n relation of a hor	ontent a in the hing of specome onship olistic p	2 2 3 and procuman beelf-reflusensitive and hur erspects	cess for being, faction.	Value of amily, seir committee;	- - - education society a	on. and natu	- - - ure/existe	2 2 - 2 ence	- - - - underste	- - 2	- - - 2
	UHV-2 Web Develo	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	Under Exten Build Apply values Devel societ	standing the Street to All specifies, human opments of the street to a specifies of the street to the street to the specifies of the street to	2 2 2 - g the consumption of the	ontent a in the hing of specome onship olistic pristence	2 2 3 and procuman beelf-reflusensitive and hurverspect.	cess for being, faction.	Value of amily, so the committee of the	education	on. and nature t toward oration	- - - ure/existed ds what t	2 2 - 2 ence		ood (humbeing), fa	amily,
20HS3205 20SC	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	2 Under Exten Build Apply values Devel	- - - 2 standin d the ha the Stre to All	2 2 2 - g the courmony engthen levels but n relation of a hor	ontent a in the hing of specome onship olistic p	2 2 3 and procuman beelf-reflusensitive and hur erspects	cess for being, faction.	Value of amily, seir committee;	educations ociety amitmen	on. and natu	- - - ure/existe	2 2 - 2 ence		- - 2	- - - 2
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	Under Exten Build Apply values Devel societ	standing the Street to All sopments y and no	2 2 2 - g the coarmony engthen levels bar relation of a horature/ex	and a special strains of special	2 2 3 and procuman beelf-refluencerspects.	cess for being, farection. We to the man sociative base	Value of amily, seir committee of seir committee	education	on. and nature t toward oration	- ure/existeds what the about the PO10	2 2 2 ence hey have	c underster (human	ood (humbeing), fa	amily,
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	Under Exten Build Apply values Devel societ	standing the Street to All sopment y and no	2 2 2 - g the control of a horacture/extends by a control of a horacture of a	ontent a in the hing of secome onship olistic pristence	2 2 3 and procuman beelf-reflesensitive and hur erspects.	cess for being, faction. The to the man socious base PO6 2 3	Value of amily, series complete on series PO7	educations ociety amitmen	on. and nature toward oration		2 2 2 2 ence hey have	c understand (human PO12 3 2	2 ood (humbeing), f	amily,
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO1 CO2 CO3	Under Exten Build Apply values Devel societ	standing the Street to All sopment y and no	g the coarmony engthen relation of a horature/ex	and a special strains of special	2 2 3 and procuman belf-refl sensitive and hur erspects.	cess for being, farection. We to the man socious base PO6 2 3 3	Value of amily, series complete on series PO7	educations ociety a mitmen PO8 3	on. and nature t toward oration	- ure/existeds what the about the PO10	2 2 2 ence hey have	c underster (human PO12 3 2 3	ood (humbeing), fa	amily,
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO1 CO2 CO3 CO4	Under Exten Build Apply values Devel societ	standing the Street to All sopment y and no	2 2 2	ontent a in the hing of secome onship olistic pristence	2 2 3 and procuman belf-reflesensitive and hur erspect.	cess for being, faction. The to the man sociative base PO6 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Value of amily, series committee of the poor series	education society and mitmen POS 3 - 3	on. and naturation		2 2 2 2 ence hey have		2 cood (humbeing), f.	amily,
	Web	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO1 CO2 CO3	Under Exten Build Apply values Devel societ	standing the Street to All sopment y and no	g the coarmony engthen relation of a horature/ex	ontent a in the hing of secome onship olistic pristence	2 2 3 and procuman belf-refl sensitive and hur erspects.	cess for being, farection. We to the man socious base PO6 2 3 3	Value of amily, series complete on series PO7	educations ociety a mitmen PO8 3	on. and nature toward oration		2 2 2 2 ence hey have	c underster (human PO12 3 2 3	2 ood (humbeing), f	amily,



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		CO1	To pr	ovide a	n intens	ive & i	n-depth	learnir	g to the	studer	nts in fie	eld of ent	repreneu	ırship		1	
		CO2										ve career		~ <u>r</u>			
	늘	CO3							-			g in the e					
	lopme	CO4		quaint t										nomic de	velopme	nt of	
20MC3204	Entrepreneurial Skill Development	CO5		alyze tł	ne role (of gove	rnment	and nor	n-gover	nment i	instituti	ons in su	pporting	entrepre	neurial		
MC	al S																
20	euri		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
	ren	CO1	2	3	3	-	-	-	-	1		-	3	2	-	-	
	rep	CO2	-	-	-	-	-	3	-	1	3	-	2	2	-	-	
	Ent	CO3	-	-	-	-	-	3	-	1	-	-	2	2	-	-	
	•	CO4	-	-	-	-	-	3	2	1	-	-	2	2	-	-	
		CO5	-	2	-	3	-	-	-	1	-	1	2	2	-	-	
				1		1	1	'	IV-I	1	1				1		
	 	CO1	T T1		ا المما	. 1 '						. C-1-	i 1-	1. o 1 -	, and Dis		
		CO1			_								orize ioo	ok angles	, and Dis	cuss	
		CO2		nunches, launch vehicles and orbital effects in satellite communications analyze the various satellite subsystems and their functionalities evaluate satellite link design and Apply the concepts of multiple access and various types of multiple eccess techniques in satellite systems.													
	on																
	ati	CO3															
	nic	CO4					ologies		h coam	ont							
103	nu	CO ₅					red by s				tions						
E4:	Communication	CO3	Desci	ibe the	SCI VICE	s rende	icu by s	satemite	and its	аррпса	mons						
20PE4103			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
,,,	ite	CO1	-	2	-	704	-	700	-	-	-	-	-	3	2	3	
	Satellite	CO2	3	2		_	_	_	-	_	-		_	-	3	3	
	Sat	CO3	3	3	_	_	_	_	_	_	_	_	_	_	3	2	
		CO4	3		3		_	_	_	_	_	_	_	_	2	2	
		CO ₅	3		3	 	_	_	_		-		_	_	2	2	
	<u> </u>	CO3	<i>J</i>	<u> </u>	3	<u> </u>		<u> </u>	<u> </u>	_	1	_					
	<u> </u>	CO1	David	ا عائم ما	Dadas :	000000	matica:	and C = 1	· · · · · · · · · · · · · · · · · · ·	rtios1	mohla						
		CO1					uation										
		CO2					% FM			11							
	20	CO3										rforman	ce.				
	ii.	CO4			•		king and										
20PE4102	Engineering	CO5					of mato display		er rece	iver per	formar	ice and E	valuate 1	the vario	us comp	onents	
`E4	ng																
20F	F		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
	Radar	CO1	3	2	-	-	-	-	-	-	_	-	_	2	2	3	
	Ra	CO2	3	2	_	-	_	-	-	_	_	_	-	2	2	3	
		CO3	3	2	-	-	-	-	-	-	-	-	-	2	2	3	
		CO4	3	2	-	-	-	-	-	-	-	-	-	2	2	3	
		CO5	3	2	-	-	-	-	-	-	-	-	-	2	3	3	
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		CO1										different					
		CO2	Learn	variou	s image	proces	sing tec	hnique	s like ii	nage er	hancen	nent both	in spatia	al and fre	equency o	domain	
		CO3	Famil	iarize v	vith bas	ic resto	ration to	echniqu	es								
	Processing	CO4	Unde	rstand s	egment	ation a	nd mort	hologic	cal tech	niques	applica	ble to vai	rious tasl	KS			
4	seo	CO5										ession m					
10	Prc		1														
20PE4104	age		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
20	Digital Image	CO1	2	2	-	_	_	_	_	_	_	_	_	_	2	2	
	igita	CO2	2	3	-	-	_	_	-	-	_	-	-	_	3	2	
	Ο	CO3	3	2	-	_	_	_	-	_	_	-	-	-	3	2	
		CO4	3	2	-	-	2	_	-	-	_	-	-	3	3	2	
		CO5	3	3	-	-	3	2	-	-	-	-	-	3	3	3	
	1	I.	-1	ı				ı	I	I	ı						
		CO1	Know	inner v	working	s of ce	llular sy	/stem aı	nd Des o	ribe th	e eleme	nts of ce	llular sys	stems.			
	ےِ	CO2		Anow inner workings of cellular system and Describe the elements of cellular systems. Categorize different interferences and Analyze cell coverage for signal and traffic in various nvironments. Distinguish the frequency management and channel assignments in cellular system and Understand the													
	Communication		_														
	ica	CO3	Distir	iguish t	he frequ	iency n	nanager	nent an	d chanı	nel assig	gnments	in cellu	lar systei	m and U	nderstan	d the	
	n		hando	offs in c	ellular	systems	S						•				
ī.	nm	CO4	Deter	mine di	gital ce	llular s	ystems.										
20PE4105	Sor	CO5	Interp	ret adv	anceme	nt in m	odern c	ellular t	technol	ogies.							
ÞE	ar (•										
	3		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
7	□ = □		101														
2	Cellular	CO1	-	3	-	-	-	-	-	-	-	-	-	-	3	2	
2		CO2		3	3	-	-	-	-	-	-	-	-	-	3	2	
2		CO2 CO3	-	3 3 3	3 3	- - -				-	-			-	3 2	3	
2	Mobile Cell	CO2 CO3 CO4	2	3 3 3	3 3 3	2	-	-	-	- - -	- - -	-		-	3 2 3	2 3 2	
2		CO2 CO3	2	3 3 3	3 3		-	-	-	-	- - -	-	-	-	3 2	3	
26		CO2 CO3 CO4 CO5	- 2 - -	3 3 3 3	3 3 3 3	3					-	- - -	- - -	- 3	3 2 3	2 3 2	
2		CO2 CO3 CO4 CO5	- 2 Acqua	3 3 3 3 3	3 3 3 3 3	2 3 essentia	- - - al to cre	- - - - ating, a	- - - - nd eval	- - - uating	- marketi	- - - -	- - - - ties. (K2	- 3	3 2 3	2 3 2	
2	Mobile	CO2 CO3 CO4 CO5	- 2 Acqua	3 3 3 3 3 aint wit	3 3 3 3 h tools	2 3 essentia	- - - al to cre	- - - - ating, a	- - - - nd eval	- - uating ting ne	- marketi w produ	- - - ng activi	- - - - ties. (K2	- 3	3 2 3 3	2 3 2	
2	Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3	- 2 Acqua Demo	3 3 3 3 3 aint with the constration of the constraint of the constra	3 3 3 3 h tools ng the k he proc	2 3 essentia ey tech ess of s	- - - al to cre niques	ating, a	- - - - nd eval marke	- - uating ting new	- marketi w produ	- - - ng activingts. (K6)	ties. (K2	- - 3	3 2 3 3 3	2 3 2	
2	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	- 2	3 3 3 3 3 aint with constrating loping to and selections.	3 3 3 3 h tools ng the k he proceeding the second to the s	2 3 essentia ey tech ess of s	- - - al to cre niques trategic	ating, a used for decision that the decision tha	- - - nd eval marke	uating ting for	- marketi w produ effectiv	- - - ng activincts. (K6 e Pricing	ties. (K2	- - 3	3 2 3 3 3	2 3 2	
	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3	- 2	3 3 3 3 3 aint with constrating loping to and selections.	3 3 3 3 h tools ng the k he proceeding the second to the s	2 3 essentia ey tech ess of s	- - - al to cre niques trategic	ating, a used for decision that the decision tha	- - - nd eval marke	uating ting for	- marketi w produ effectiv	- - - ng activingts. (K6)	ties. (K2	- - 3	3 2 3 3 3	2 3 2	
	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	- 2	3 3 3 3 aint wite onstrating loping to and sell loping a	3 3 3 3 h tools ng the k he proceeding the holisti	2 3 essentia ey tech ess of s the righ c persp	al to cre niques trategion t marke	ating, a used for decision that decision tha	nd eval	uating ting nering for norder	marketi w produ effectiv to mee	ng activirencts. (K6) e Pricing t strategi	ties. (K2)	- - 3) ucts. (K6 ves. (K3	3 2 3 3 3	2 3 2 3	
	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	- 2	3 3 3 3 aint with constrating loping to and selection and selection are loping at lopi	3 3 3 3 h tools ng the k he proceeding the second to the s	essential ey tech ess of sthe right c persp	- - - al to cre niques trategic	ating, a used for decision of differ	nd eval	uating ting for	marketi w produ effectiv to mee land Sc	ng activincts. (K6 e Pricing t strategiape (K6)	ties. (K2) c of Production of the cobjection of	- 3 3 ucts. (K6 ves. (K3	3 2 3 3 3	2 3 2	
200E4103 2	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	Acqua Demo Devel Study Devel	3 3 3 3 aint wite onstrating loping to and sell loping a	3 3 3 3 h tools ng the k he proceeding the holisti	2 3 essentia ey tech ess of s the righ c persp	al to cre niques trategion t marke	ating, a used for decision the differ PO6	nd eval	uating ting nering for heting PO8	marketi w produ effectiv to mee land Sc.	ng activirencts. (K6) e Pricing t strategi	ties. (K2) g of Product objection	- 3) ucts. (K6 ves. (K3	3 2 3 3 3 5)	2 3 2 3	
	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	- 2	3 3 3 3 aint with constrating loping to and selection and selection are loping at lopi	3 3 3 3 h tools ng the k he proceeding the holisti	essential ey tech ess of sthe right c persp	al to cre niques trategion t marke	ating, a used for decision of differ	nd eval	uating ting newing for norder-keting	marketi w produ effectiv to mee land Sc	ng activincts. (K6) e Pricing t strategiape (K6) PO10 2	ties. (K2) g of Production objection objection 3 2	- 3 3 ucts. (K6 ves. (K3	3 2 3 3 3	2 3 2 3	
	Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	Acqua Demo Devel Study Devel	3 3 3 3 aint with constrating loping to and selection and selection are loping at lopi	3 3 3 3 h tools ng the k he proceeding the holisti	essential ey tech ess of sthe right c persp	al to cre niques trategion t marke	ating, a used for decision the differ PO6	nd eval	uating ting for in order keting	marketi w produ effectiv to mee land Sc.	ng activincts. (K6 e Pricing t strategiape (K6)	ties. (K2) g of Product objecti PO11 3 2 1	- 3) ucts. (K6 ves. (K3	3 2 3 3 3 5)	2 3 2 3	
	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4	- 2	3 3 3 3 3 aint wittenstrating loping to and selections are level to a level t	3 3 3 3 h tools ng the k he proceeding to holisti PO3	2 3 essentiately techness of sthe right copersp	al to cre niques intrategic t market ective of	ating, a used for decision of differ	nd eval	uating ting nering for horder keting	marketi w produ effectiv to mee land Sc. PO9 3 1 -	ng activiracts. (K6) e Pricing t strategiape (K6) PO10 2		- 3 oucts. (K6 ves. (K3	3 2 3 3 3 5)	2 3 2 3	
	ement Mobile	CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5	- 2	3 3 3 3 aint wite onstrating loping to and self loping a PO2	- 3 3 3 3 3 h tools ng the k he procedecting to holisti PO3	2 3 essential ey tech ess of sthe right c persp PO4	al to cre niques trategic t marke ective o	ating, a used for decision the decision of differ	nd eval	uating ting for in order keting	marketi w produ effectiv to mee land Sc.	ng activiracts. (K6) e Pricing t strategiape (K6) PO10 2 -	ties. (K2) g of Product objecti PO11 3 2 1		3 2 3 3 3 5)	2 3 2 3 PSO2 - -	



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		CO1	Under	rstand v	vhy hui	ldings s	should b	ne made	enerox	efficie	nt						
		CO2										Passive S	olar heati	ing and c	ollection		
		COZ										n to gree		_		,	
		CO3										ilding Fa		<u>s concep</u>	,,,,		
		CO4												Fnerov	Manage	ment	
	Buildings	CO4		ater co			mma	tion and	i ventne	mon, L	igittiig,	Treating	, Coomi	s, Liici gy	vivianage	ment	
104	ij	CO5													ergy Effi	cient	
200E4104	Bu		Build	ings. Tl	ney sha	ll be eq	uipped	with the	e associ	ated cu	tting-ed	ge mana	gement s	trategies	too.		
502	Green		1			T	T	T	T	•	•			T	1		
``	Gre		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
		CO1	2	-	-	-	-	1	3	-	2	1	-	-	-	-	
		CO2	2	-	-	-	-	1	3	-	2	1	-	1	-	-	
		CO3	2	-	3	-	-	-	3	-	2	1	-	2	-	-	
		CO4	2	-	3	-	-	2	3	-	2	1	-	2	-	-	
		CO5	2	-	-	-	-	1	3	-	2	1	-	1	-	-	
		CO1							nd its v	arious	applicat	ions, as	well as th	ne function	oning of		
				erry Pi													
	(£-)	CO2				•								<u> </u>			
) AC	CO3	1 7 1 3														
)S(~~.															
L L	ioi	CO4										elected c				_	
10	cat	CO5		•		•		at apply	IoT co	oncepts	to real-	world ap	plication	s in vario	ous fields	and	
20SC4105	Applications (SAC-3)		troub	leshoot	IoT app	plication	ns.										
206	Ϋ́									200		2010	5011	2010			
	8	GO 1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
	Tools	CO1	3	-	-	-	2	1	-	-	-	-	-	-	3	1	
				-	3	-	-	-	-	-	2	1	-	-	3	2	
1	-	CO2	-												_		
	ЮТ	CO3	-	-	-	3	-	-	-	-	-	-	2	-	3	1	
	loT	CO3 CO4		-	3	3	-	-	-	-	2	-	3	-	3	2	
	IoT	CO3	-	-							2 2						
	IoT	CO3 CO4	-	-						-				-	3	2	
	Tol	CO3 CO4		- 3	3	-	-	-	-	-	2	-	3	1	3	2	
	Tol	CO3 CO4 CO5	- - - The in	- 3	3 -	- - le to ap	- oply the	- - theore	- - tical co	- - ncepts	2 and pri	- - nciples le	3	1	3	2	
	Tol	CO3 CO4 CO5	- - The in	- 3 atern wi	3 - II be ab	- - le to ap	- - pply the tuation	- theore	- - tical co	- - ncepts during	2 and pri the into	- - nciples le ernship.	3 - earned in	- 1 their ac	3 3 ademic	2 2	
	Tol	CO3 CO4 CO5	- - - The in course	- 3 stern wi	3 - II be ab o real-v	- le to ap vorld si	- oply the tuation n expe	theore	- tical co intered	- ncepts during fying ar	2 and pri the into	- - nciples le ernship. ng practi	3 - earned in	- 1 their ac	3 3 ademic	2 2 heir	
	Tol	CO3 CO4 CO5 CO1	The in course	- 3 atern wi ework t atern wi	3 - II be ab o real-v II gain h or indu	- le to ap vorld sinands-oustry, de	- oply the tuation on exper	theore s encourience in	tical co intered n identi he abili	- ncepts during fying ar ty to an	and pri the into nd solvi alyze, t	- nciples le ernship. ng practi roublesh	3 - earned in cal probl oot, and	their ac	3 3 ademic evant to t	2 2 heir ions.	
	Tol	CO3 CO4 CO5	The in course The in field c	- 3 attern wi ework t atern wi of study	3 - II be above real-version indu	- ole to ap vorld si nands-o istry, de nce the	- oply the tuation in exper emonst	theore s encourience in rating the	- tical co intered n identi he abili	- ncepts during fying ar ty to an collabo	and pri the into nd solvi alyze, to	- nciples le ernship. ng practi roublesh skills by	3 - earned in cal probl oot, and interaction	their ac	3 3 ademic evant to tent solut colleague	2 2 heir ions.	
02	Tol	CO3 CO4 CO5 CO1	The in course The in field course the insupervision of the insupervision	- 3 atern wi ework t atern wi of study utern wi	3 - II be above real-version indu	- ole to ap vorld si nands-o istry, de nce the	- oply the tuation in exper emonst	theore s encourience in rating the	- tical co intered n identi he abili	- ncepts during fying ar ty to an collabo	and pri the into nd solvi alyze, to	- nciples le ernship. ng practi roublesh	3 - earned in cal probl oot, and interaction	their ac	3 3 ademic evant to tent solut colleague	2 2 heir ions.	
44102	Tol	CO3 CO4 CO5 CO1 CO2	The in course The in field of the in super inform	atern wi ework to tern wi of study extern wi visors, a nation.	3 - II be ab o real-v II gain h or indu II enha	- le to ap world sinands-oustry, de nce the nts, cor	- oply the tuation on exper emonst ir comm	theore s encou rience in rating the nunicating effect	tical co intered n identi he abili ion and	- ncepts during fying ar ty to an collabo o team	and pri the into nd solvi alyze, t pration project	- nciples le ernship. ng practi roublesh skills by s and cle	arned in cal probloot, and interactinally converse	their ace	3 3 ademic evant to t ent solut colleague eas and	heir ions.	
0PR4102	Tol	CO3 CO4 CO5 CO1	The in course The in field of The in superinform	atern wi ework to tern wi of study otern wi visors, a nation.	3 II be ab o real-v II gain h or indu II enhan and clie	- ole to approved a vorld simulation of the nands-oustry, de nce the nts, cor	- oply the tuation in exper emonst ir comm ntribution	theore is encourience in rating the nunicating effect	- tical co intered n identi he abili ion and tively t	- ncepts during fying ar ty to an collabo o team bility in	and pri the into nd solvi alyze, t pration project	- nciples le ernship. ng practi roublesh skills by s and cle	arned in cal probloot, and interactinarly convanging w	their actions release implementation of the control	3 3 ademic evant to tent solut colleague	heir ions.	
20PR4102	Tol	CO3 CO4 CO5 CO1 CO2 CO3	The in course The in field of the in superinforn The in tasks,	atern wi ework to tern wi of study atern wi visors, a nation.	3 - II be ab o real-v II gain h or indu II enhal and clie II demo	- le to ap world sinands-oustry, de nce the nts, cor	oply the tuation experience of the comment in comment in the comme	theore s encourience in rating the nunicating effects ability a showcas	tical co intered n identi he abili ion and ctively t	ncepts during fying an ty to an collabo o team bility in	and pri the into nd solvi alyze, to pration project dealing to lear	nciples le ernship. ng practi roublesh skills by s and cle g with ch	arned in cal probloot, and interaction arly converse was quick	- 1 their access relations relations with a verying idealy.	3 3 ademic evant to t ent solut colleague eas and	heir ions.	
20PR4102	Tol	CO3 CO4 CO5 CO1 CO2	The in course The in field of The in super inforn The in tasks,	attern wi ework to tern wi of study attern wi visors, a nation. attern wi and un	3 - II be aboo real-v II gain h or indu II enhal and clie II demo	le to apworld sinands-oustry, dence the onstrate	oply the tuation experemental ir communitation experience adaptation experience adaptati	theore s encou rience in rating the nunicat nunicat ability a showcas erstance	tical co intered n identi he abili ion and ctively t nd flexi sing the	ncepts during fying ar ty to an collabo o team bility in ability professi	and pri the intend solvi alyze, to pration project dealing to lear onal et	nciples le ernship. ng practi roublesh skills by s and cle g with ch n and adj hics, wor	arned in cal probloot, and interactinally converse anging we ust quick kplace e	their actions released implements with coveying ideased to the coveying idease	3 3 ademic evant to t ent solut colleague eas and	heir ions.	
20PR4102	Tol	CO3 CO4 CO5 CO1 CO2 CO3	The in course The in field of The in super inforn The in tasks,	attern wi ework to tern wi of study attern wi visors, a nation. attern wi and un	3 - II be aboo real-v II gain h or indu II enhal and clie II demo	le to apworld sinands-oustry, dence the onstrate	oply the tuation experemental ir communitation experience adaptation experience adaptati	theore s encou rience in rating the nunicat nunicat ability a showcas erstance	tical co intered n identi he abili ion and ctively t nd flexi sing the	ncepts during fying ar ty to an collabo o team bility in ability professi	and pri the intend solvi alyze, to pration project dealing to lear onal et	nciples le ernship. ng practi roublesh skills by s and cle g with ch	arned in cal probloot, and interactinally converse anging we ust quick kplace e	their actions released implements with coveying ideased to the coveying idease	3 3 ademic evant to t ent solut colleague eas and	heir ions.	
20PR4102	Industrial/Research Internship	CO3 CO4 CO5 CO1 CO2 CO3	The in course The in field of the in superinforn The in tasks, The in impor	attern with tern	3 - II be ab o real-v II gain h or indu II enha and clie II demo foresee II exhib f adher	le to apyorld sinands-oustry, dence the onstrate en challe it a stro-ing to i	oply the tuation experience adaptate enges, song und	theore s encourience in nunicating effectability a showcaserstance r-specific	tical co intered n identi he abili ion and ctively t nd flexi sing the ling of p	ncepts during fying and collaboro team bility in elability profession of con	and pri the into nd solvi alyze, to ration project dealing to lear onal et duct du	nciples le ernship. ng practi roublesh skills by s and cle g with ch n and adj hics, wor ring thei	arned in cal problem oot, and interaction arly converse was quick kplace errinterns	ems reletimplements with a verying id vork envicely.	ademic evant to tent solut colleague eas and ronment and the	heir ions.	
20PR4102	Tol	CO3 CO4 CO5 CO1 CO2 CO3	The in course The in field of The in super inform The in tasks, The in impor	attern witern wi	3 III be aboo real-vill gain hor indu III enhaland clie III demo	le to apworld sinands-oustry, dence the onstrate	oply the tuation experemental ir communitation experience adaptation experience adaptati	theore s encou rience in rating the nunicat nunicat ability a showcas erstance	tical co intered n identi he abili ion and ctively t nd flexi sing the	ncepts during fying ar ty to an collabo o team bility in ability professi	and pri the intend solvi alyze, to pration project dealing to lear onal et	nciples le ernship. ng practi roublesh skills by s and cle g with ch n and adj hics, wor	arned in cal probloot, and interactinally converse anging we ust quick kplace e	their actions released implements with coveying ideased to the coveying idease	ademic evant to tent solut colleague eas and ronment and the	heir ions.	
20PR4102	Tol	CO3 CO4 CO5 CO1 CO2 CO3	The in course The in field of the in superinforn The in tasks, The in impor	attern with tern	3 - II be ab o real-v II gain h or indu II enha and clie II demo foresee II exhib f adher	le to apyorld sinands-oustry, dence the onstrate en challe it a stro-ing to i	oply the tuation experience adaptate enges, song und	theore s encourience in nunicating effectability a showcaserstance r-specific	tical co intered n identi he abili ion and ctively t nd flexi sing the ling of p	rcepts during fying an ty to an collabo o team bility in ability professi of con	and pri the into nd solvi alyze, to ration project dealing to lear onal et duct du	nciples le ernship. ng practi roublesh skills by s and cle g with ch n and adj hics, wor ring thei	arned in cal problem oot, and interaction arly converse was quick kplace errinterns	ems reletimplements with a verying id vork envicely.	ademic evant to tent solut colleague eas and ronment and the	heir ions.	



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

	CO3	-	-	-	_	-	-	-	_	3	3	2	-	2	2
	CO4	-	-	-	-	-	2	-	-	-	-	2	3	2	2
	CO5	-	-	-	-	-	2	-	3	3	-	-	-	2	2
							I	V-II							
	CO1	Unde	rstand t	he adva	anced to	echnolo	ogy and	resear	ch in En	gineeri	ng				
	CO2	Collab	orate v	vith tea	m men	nbers in	analyz	ing the	require	ements	of the pr	oject to l	be devel	oped.	
	CO3	Build	necessa	ary desi	gn spec	ificatio	ns and	docume	ents for	the cho	sen proj	ect			
	CO4	Devel	op apt o	domain	and ted	chnical	knowle	dge to i	implem	ent/cod	de the ap	plication	and dep	loy the p	roject
roject		after i	mplem	entatio	n										
īō	CO5	Demo	nstrate	the pro	oject co	mpreh	ensively	with n	ecessaı	ry tools					
r P															
Мајо		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Σ	CO1	3	-	-	_	-	-	-	-	-	- 1	-	3	2	2
	CO2	2	-	2	-	3	-	-	-	3	3	3	3	2	3
	CO3	1	-	3	3	3	-	-	-	-	-	-	3	2	3
	CO4	2	-	3	3	2	-	-	2	-	-	-	3	2	2
	CO5	-	-	-	-	-	-	-	3	-	3	-	3	2	2