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VIDISHA	M.P.

## SAMRAT ASHOK TECHNOLOGICAL INSTITUTE

(Engineering College), VIDISHA M.P.

(An Autonomous Institute Affiliated to RGPV Bhopal)

## -----CIVIL ENGINEERING------

Semester/Y	'ear		111/11	Program			B.Tech			B.Tech			
Subject Category	DC	Su	bject Code:	CE-3	301	Subje Name	ct e:	Mec	hanics	of N	later	ials	
			Maximum N	∕larks A	llotted			-	Cont	act H	oure		
	r	Theo	ry	<del></del>	F	Practical		Total	Conta		Juis	Total	
End Sem	Mid-S	Sem	Assignment	Quiz	End Sem	Lab- Work	Quiz	Marks	L	Т	Ρ	Credits	
60	20	)	10	10	30	10	10	150	3	-	2	4	
Prerequisit	es:												
Physics an	d Math	iemat	tics.										
Course Ob	jective	:					-			-			
students a stress, stra principal pl deformable behavior so systems.	re expe in and anes, t solids o that t	defoi theory ; incl he st	rmation of sol y of torsion ar uding static e udents can so	id and id stres quilibrit olve rea	state of state of ses in s um, geol al engine	stress, springs, metry of pering p	cal pro strain fundai f defor roblem	energy, pri mental con mation, an is and des	materi ncipal ncepts nd mate ign enq	ais, c stres of me erial c ginee	s and char char const ring	pt of d nics of itutive	
Course Ou	tcomes	3:				11.4							
After comp 1. De dei 2. De loa 3. De	letion o velop a formab termin idings. sign si	an un an un le bo e stre mple	course, the s derstanding o dies. ess, strain, de bars, beams	flection and cir	and rot	able to: ing fund ation in afts for	ament memt allowa	als of strue bers subject	ctural r cted to es and	nech comt load	anics binat s usi	s of ion of ng	
	Горпа			<u>פוווק פו</u> ח		ng prop	enties.				Irc	CO's	
1	Simp Conc types bars, Comp stress Princ	le S ept of complex s s system	tress and S of Elastic bo tress and stra posite and tap Stress and St stem. Norma Stresses and	Strains: dy, Str ains, El pering t rains: T and strains,	Mecha ress and lastic co pars, Tel Two dim tangent Mohr's	anical d d Strair onstants mperatu nensiona ial stre circle o	Prope n, Hoc , Stres ure stre al and sses, f stres	rties of r oke's law, sses in col esses and three dime Principal ses.	nateria variou mpoun strain. ensiona Planes	I, s d al	10	CO1, CO2	
	Shea and coupl of Co force Theo	r For Bend Ie, Si ontraf . SFE	ce, Bending ling moment mply Support flexure, Relat and BMD by Bending: Co	Momer Diagra ted, Ca tionship Graph	nt & Def am in b ntilever betwee nical Met of pure	flection beams and Ov en bend thod. bendin	of Bea with v erhan ling m g. Equ	ams: Shea arious loa ging beam noment and uation of b	ar Forc ads an is, Poir d shea pending	ce nd nt ar CO1,			
	Neuti simpl vario	ral ax ly su us loa us Stru	(is, Section-M pported, Can ads and coup ess distribution	lodulus tilever les,	and Ov	minatior verhangi	n of be ng be	ending stre ams subje	esses i ected t	n O	-	CO3	
	sectio	ons, E	Built-up beam	s and S	Shear flo	DW.	Jean			5			
	Defle Defle Mom	ction ction ent A	of beams: Do by Method rea Method.	ouble I of Su	ntegratio perposit	on Meth ion, Co	od, M njugat	acaulay's l e Beam i	Methoomethoo	1, 1,	5	CO1, CO2	
IV	Torsi Deter sectio	on c rmina on,	of Shafts: C ition of shear Torsional M	oncept stress oment	of pu and an Diagra	ire tors igle of t im (TN	ion, wist o 1D).	Torsion e f shafts of Hollow sł	quation circula nafts.	n, ar	7	CO1, CO2, CO3	

	Transmission of power by circular springs, Leaf Spring, Spiral Spring	shafts, Open and closed coil					
	Pressure Vessels: Thin and Thick Stress due to internal pressure, ch Compound cylinders and shrink fitting	-walled cylinders and spheres, nange in diameter and volume, gs, Theories of failure.					
	Columns and Struts: Eccentric loadi load for uniform section, various en Stress in columns, Secant formula.	0	CO1.				
V	Unsymmetrical Bending and Curved plane which is not a plane of symme of curved beams of rectangular, ci Stress distribution and position of neu	9	CO2				
Guest Lect	ures (if any)		10				
Suggestive	S		40				
1.To f2.To f3.To f4.To y5.To y6.To y7.To g8.To g9.To g10.To g11.Med12.Med13.Streg2.Mechaa3.StrengModes of F	ind Modulus of Elasticity 'E' of Mild Stee ind Modulus of Rigidity 'N' of Mild Stee ind Modulus of Rigidity 'N' of spring ma verify Shear Force at a given section of verify Bending Moment at a given section verify Bending Moment at a given section verify Maxwell's Theorem of Reciprocal berform Tensile Test on M.S. and C.I. s berform Compression test on Teak and pare their results. determine Ultimate Shear Strength of M determine Modulus of Rupture of Teak chanics of Materials, by R.C. Hibbeler, I chanics of Materials, by Barry J. Goodn ength of Materials, Pytel and Singer, Harp anics of Materials, Beer and Johnston, gth of Materials, Subramanian R, Oxfor valuation and Rubric	el and Wood by Deflection method I by Barton's vertical torsion appar aterial by Spring test apparatus. a Simply Supported Beam. on of a Simply Supported Beam. Deflection. specimen and draw stress strain cu Jungle wood and R.C.C. C.I. cub M.S., C.I. and Brass. and Sal wood beam by Flexural Te Pearson Publications. o& James M.Gere, Cengage Publ illiam; McGraw Hill International er International. McGraw Hill. d Publications	d. atus. irve. bes and est ication:	S.			
Quiz, Assig	gnment, Midterm exam, End term exam	and Practical Viva.					
Rubric: En	d term exam. Practical: 50% Quiz and s	50% Viva.					
LIST/LINKS C	of e-learning resource						
https://swa	yam.gov.in/nd1 noc20 ces0/preview						
Recommer	ndation by Board of studies on	08-06-2023					
Approval b	y Academic council on						
Compiled and designed by							
Subject ha	ndled by department	Civil Engineering Department					

SAMRAT ASHOK TECHNOLOGICAL INSTITUTE													
GTA	(Engineering College), VIDISHA M.P.												
N. Come	and the second second		(An A	Autonoi	mous In	stitute A	Affiliat	ed to RGP	V Bhop	al)			
VIDISHA M.P.	X			C	IVIL	ENGI	NE	ERING-					
Semester/Y	ear		/		Progr	am			B.T	ech			
Subject	DC	Sub	ject Code:	CE-302 Subject Building Planning &		& Const	ruction						
Calegory			Maximum M	Marks Allotted									
	Theo		у	Practical Contact					ct Hours	5 Total			
End Sem	Mid-	Sem	Assignment	Quiz	End Sem	Lab- Work	Quiz	z Marks	L	т р	Credits		
60	2	0	10	10	30	10	10	150	3	- 2	4		
Prerequisite	es: Grant	nice											
Course Obi	ective:	lics											
Students ar	e expe	cted to	learn the prir	nciples o	of planni	ing, byla	ws of	building co	nstructio	on; to dr	aw plan,		
elevation ar	nd sect	ion of	load bearing a	nd fram	ned build	lings; to	learn	about to dr	aw varie	ous build	ling		
services fac	ilities;	to prep	pare detailed v	vorking	drawing	for joine	əry in	buildings, s	stair cas	es and t	o learn to		
draw the pe	rspect	ive dra	wing.										
Course Ou	tcome	S:											
After comp	letion o	of the c	course, the stu	ident w	ill be ab	le to:		_					
1. Draw the	variou	is elem	ents of buildin	igs like	staircas	e, joiner r buildin	ies et	C. Doing & ito f	unation				
2. Apply the	n alav	pies oi ation a	planning and and section for	various	useu io s types c	f buildin	y piai as - r	ining & its i pesidential a	unctiona	ic buildir	l. Das		
4. To selec	t suita	ble tv	pe of foundat	ion and	d variou	s types	ofbr	ick masoni	rv. door	and wi	ndows for		
buildings.									<b>,</b>				
5. Classify	diffe	rent t	ypes flooring	and	various	building	g sei	rvices like	water	supply,	drainage,		
electrificatio	n, fire	safety	and acoustics	in the l	ouilding.		•						
UNITs	Desc	ription	S							Hrs.	CO's		
	Draw	ing o	f Building El	lements	s – Dra	awing c	of va	rious elem	nents o	f			
I	wind	ow. va	arious types	of doo	rs. wind	dow and	d ver	ntilator. lint	els and	i 10	CO1		
	arche	es, sta	irs and stairca	ase, tru	sses, fl	ooring, r	oofs	etc.					
	Build	ing P	lanning – Pro	ovision	s of Na	ational E	Buildiı	ng Code,	Building	3			
п	bye-l	aws,	open area,	setbac	cks, FA	R term	ninolo	ogy, Princi	ples o	f 7	CO2		
	archi	tectura	al compositio	on (i.e.	unity,	contra	st, e	tc.), princi	iples o	f   '	002		
	planr	ning, o	rientation, en	ergy ef	ficient b	uildings	. <u>.</u>						
	Desig	gn and	Drawing of	Buildin	g – ⊢ur dan tial	nctional	desig	on and pre	paratior		000		
111	or a build	etallec	a arawings (	of resi	dential,	Institut	lional	and con	nmercia	· / /	003		
	Foun	ings, c	Types of for	undatio	ns wal	footing	is ari	llage foun	dations				
	well	founda	ation. under re	amed	oiles. D	amp pro	of co	ourses.	dationio	,			
	Maso	onry a	nd Walls: Brid	ck mas	onry, Bo	onds, St	tone	masonry, r	nasonry	,			
	cons	tructio	n, code prov	visions	regardi	ng load	bea	ring and r	ion-load	ł			
IV	beari	ng wa	alls, precast s	stone n	nasonry	block,	Hollo	w concret	e block	, 8	CO4		
	plast	ering	and pointing	g, whit	e and	color \	washi	ing, dister	npering	,			
	damp	oness	and its proted	ction. D	oors, W	/indows	and	Ventilators	: Types	,			
	base	d on	material et	C., Siz	e loca	tion, fit	ttings	, construc	ction o	f			
	suns	hades	, sills and jam	ibs, RC	C doors	s/windo	NS fra	imes.					
	FIOOI	s and	a Roots: Typ	bes, m d alab	inimum		ess,	constructio	n, 1100	r			
V	coilin	ies, ri	f coverings E	u siab	and un	ofing un	jis, p	ater proofi	na naise	, β	CO5		
v	Sorvi	19, 100 icee: 1	Nater supply		ainade	Flectrifi	no, w	n Fire proull	ny. Nection	°	005		
	thern	nal ine	ulation Air C	ondition	nina Ac		& Sn	und insulat	ion	,			
Guest Lecti	ires (if	anv)			y, Au	000000	u 00				<u> </u>		
Total Hours		<u>((</u> ,,,)								40			
										10	1		

Suggestive list of experiments:										
1. Sketches of various building components.										
2. One drawing sheet of various building components containing doors, windows ventilators,										
3. One drawing sheet of lintels and arches.	adationa									
4. One drawing sheet of various types of four	idations.									
<ol> <li>One drawing sneet of stancases,</li> <li>One drawing sheet containing detailed play</li> </ol>	nning of a single-story residential building									
(common to all students)										
<ol> <li>One drawing sheet of residential building (</li> <li>One drawing sheet of public building (Each</li> </ol>	Each student will make a different drawing). n student will make a different drawing).									
Text Book- 1. Chakraborty; Building Drawing										
2. Shah, Kale & Patki; Building Design and Drawing; TMH										
3. Sushil Kumar; Building Construction,										
4. B.C. Punmia; Building Construction										
Reference Books-	a Diophing Design and Schoduling									
i. Gurucharan Singn & Jagdish Singh Buildin	1. Gurucharan Singh & Jagdish Singh Building Planning, Design and Scheduling.									
2. Malik & Meo; Building Design and Drawing.										
3. Building Construction, Metchell										
4. Construction Technology, Chudley R.										
Modes of Evaluation and Rubric										
Quiz, Assignment, Midterm exam, End term exam a Rubric: End term exam. Practical: 50% Quiz and 50	and Practical Viva. 0% Viva.									
List/Linko of a lagraning resource										
LIST/LINKS OT e-learning resource	-2r06/									
https://nptel.ac.in/n00/courses/10022/3EM1/10022	<u>aloo/</u>									
https://nptel.ac.in/courses/105/107/105107156/										
Decommondation by Decod of studies are	00.00.0000									
Recommendation by Board of Studies on	08-06-2023									
Approval by Academic council on										
Compiled and designed by										
Subject handled by department	Civil Engineering Department									

SHOK TECHNOLOGICAL	SAMRAT ASHOK TECHNOLOGICAL INSTITUTE											
AND GTAR	(Engineering College) VIDISHA M P											
PECRE	(An Autonomous Institute Affiliated to RGPV Bhopal)											
VIDISHA M.P.	1		(741						ыюра	_		
the outg determine	1					. ENGI			<u> </u>	<b>-</b>		
Semester/	rear		111/11		Proc	gram Subier	∼t		B. I	ech		
Category	DC	Su	bject Code:	CE-	303	Name	):	Surve	Surveying & Geomatics			tics
			Maximum	Marks /	Allotted			Contact				
	T	Theo	ry	1		Practical	1	Total	ŀ	lours		Total
End Sem	Mid-S	Sem	Assignment	Quiz	End Sem	Lab- Work	Quiz	Marks	L	Т	Ρ	Credits
60	20		10	10	30	10	10	150	0 3 - 2 4			
Prerequisit	tes:											
	icotivo											
The stude	pjective:	ovno	cted to under	etand t	he imp	ortance o	fourve	wing in the	field	of civi		aineering
and to lea	arn the	basi	ics of linear/	angular	measi	urement	metho	ds like cha	neiu u ain su	rvevii	na (	compass
surveving.	plane	table	survevina ir	n plan	making	. levelling	and	theodolite	survev	in e	eleva	tion and
angular me	easurer	nents	& tachometri	c surve	ey for di	stance ar	nd heig	ht measure	ment			
Course Ou	utcomes	5:										
After comp	letion o	of the	course, the s	tudent	will be a	able to:						
1. Ide	entifv th	ne co	ncept of surv	evina.	levelind	and cor	ntourin	a and carry	v out l	inear	and	angular
me	easurer	nents	required by a	differen	t metho	ds of surv	veying	5,				angara.
2. Ca	arry out	trave	ersing, trigono	metrica	ally leve	eling and	tachor	metry using	appro	priate	e ins	truments
an	and perform calculations											
3. Identify different types of curves and perform calculations for setting out												
4. Explain the triangulation principle and its application in control survey												
5. De	emonstr	ate t	he knowledge	e of hy	drograp	hic surve	ying, p	ohotographi	c surv	reying	g and	d remote
se	nsing.			_		_						
UNITS					Descript	ions				<u>н</u>	rs.	CO's
I	Introd metho Local Levell levels and Trigor metho Conto	uction ods, S attrac ing: , Met cross nome ods. puring	n to Survey Survey station ction, Declina Principles of hods- simple sectioning. tric levelling: : Characterist	ng- Pr s, Surv tion, Di levellir differe Digital Indire	inciples rey lines p, Latitung- Dur ential, re and ect leve	s, Linear, s- ranging ude and D mpy leve eciprocal Auto Lev elling, lev uses.	angu J, Bear Departu I bool Ievellin vel, E relling	ilar and gra- ing of surve ure. king and re ng, profile le rrors in le on steep g	aphica y lines educin evellin velling ground	al 5, 9 9, 1-	9	CO1
11	Trave latitud plottin EDM, Tacho analla field v traver	rsing g & Trigo ometr tic le vork sing a	by theodolit adjusting or to ponetrical le y: Tachometri ns, tangential reduction, dir and contourin	e, Fiel s, adju raverse veling. c syste syster ect-rea g.	d work stments e, Omiti ems and m, suble ding ta	c checks, s, compu- ted meas l principle ense syst chometer	trave itations sureme es, stac em, in es, use	erse comput s of co-orc ents, Measu dia system, i strument co e of tachome	tations linates remer uses o nstan etry fo	5, 5, nt of t, or	8	CO2
	Curve setting revers curve	s: Cla g ou se cu s, set	assification ar tcurves by c rves, transitic ting out.	nd use; offsets on curve	elemer and by es, cub	nts of circ / theodol ic spiral :	ular cu lites, c and le	urves, calcu compound mniscates,	lations curves vertica	5, 5, al	7	CO3
IV	Contr princi	ol Su ole,	rveys: Provid conaissance,	ling fra selec	ime wo tion a	rk of cor nd mark	ntrol p ting o	oints, triang of stations,	gulatio angl	n e	8	CO4

	measurements and corrections, baseline	e measurement and corrections,		
	computation of sides, precise traversing.			
V	Hydrographic Surveying: Soundings computations and plotting. Principles o photography, tilt and height distortic equipments, elements of image in systems.	, methods of observations, f photographic surveying: aerial ons, Remote sensing, simple nterpretation, image-processing	8	CO5
Guest Lec	tures (if any)			
Total Hou	rs		40	
Suggestive	e list of experiments:			
1. Cl	nain Surveying			
2. Pl	ane table Surveying			
	ompass surveying			
4. Le	easurement of Angle by theodolite			
6 PI	otting a closed Traverse in field by using T	heodolite		
7. Pl	otting an open Traverse in field by sing Th	eodolite		
8. De	etermination of constants of Tachometers			
9. M	easurement of Horizontal Distance by stac	lia Tachometer		
10. M	easurement of Height and distances by Ta	ingential Tachometry.		
11. To	Settling and simple curve by linear method	ods.		
Text Book	-			
1. T.	P. Kanetkar, Surveying & Leveling, Vol. I &	& II.		
2. D	uggal; Surveying vol I and II; TMH			
3. Ba	asak; Surveying and Leveling; TMH			
4. R	E.Devis, Surveying theory & Practice, Mc.	Graw Hill, New York		
Reference	Books-			
1. Da	avid Clark & J Clendinning, Plane & Geode	etic surveying Vol. I & II, constable	& Co,	London.
2. S.	K. Roy, Fundamentals of surveying, prent	ice - Hall of India New Delhi		
3. B.	C. Punmia, Surveying Vol. I, II, III, Laxmi F	Publications New Delhi		
4. K.	R. Arora, Surveying Vol. I & II, standard be	ook House, New Delhi		
Modes of	Evaluation and Rubric			
Quiz, Assi	gnment, Midterm exam, End term exam ar	nd Practical Viva.		
Rubric: En	d term exam. Practical: 50% Quiz and 509	% Viva.		
List/Links	of e-learning resource			
https://sw	ayam.gov.in/nd1 noc20 ce51/preview			
Recomme	ndation by Board of studies on	08-06-2023		
Approval b	by Academic council on			
Compiled	and designed by			
Subject ha	indled by department	Civil Engineering Department		

SAMRAT ASHOK TECHNOLOGICAL INSTITUTE												
S. Carbo	(Engineering College), VIDISHA M.P.											
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the sale sheet	· · · · ·			·C		ENGI	NE			• ••		
Semester/Y Subject	ear			05.0	Prog	jram B.Tee Subject ~ -				ech	1	
Category	DC	Sub	oject Code:	CE-3	304	Name	): :	Co	ncrete Technology			
		Theor	Maximum Marks Allotted Contac						ct Hou	rs	Total	
End Sem	Mid-S	Sem	Assianment	Quiz	End	Lab-	Quiz	– Total z Marks	L	т	Р	Credits
60	20	0	10	10	Sem 30	Work 10	10	150	3	-	2	4
Prerequisit	es:											
Building Ma	aterials	6										
Course Ob	jective	:										
Studente e			l to loorn to :	Inderet	and the	proper	tion	of incredia	nte of a	onoro	·	to study
behavior o	f conci	rete ir	n its fresh an	d harde	and the	ate; to s	study	about the	ents of c	te des	ie; sigr	mix; to
know abou	t the p	roced	ures in concre	eting;								
Course Ou	tcomes	S:										
After comp	letion (	of the	course, the s	ludent	NIII DE a	adie to:						
1. Te	st all th	ne con	crete materia	ls as pe	er IS co	de.						
2. De 3 De	termin sign th	e the	properties of f	resh ar	nd hard	ened of	conc	rete				
4. En	sure q	uality	control while	testing/	sampli	ng and a	accep	tance crit	eria			
5. De	sign sp	pecial	concretes an	d their :	specific	applica	tions			Line		00'a
UNITS	Cond	rete	Making Ma	terials	: Cem	ent. Fir	ne A	aareaate.	Coarse		5.	COS
	aggre	egate,	Water, Cher	nical &	Minera	al admix	tures	5. Differen	t test or			001
I	ceme	ent as lards.	per Indian s Bulking of sa	tandarc nd. Sie	ls, Tes ve anal	ts on ag Ivsis – G	igreg iradir	ates as po no.	er Indiar	8		COT
	Prop	erties	s of Fresh a	nd Har	dened	Concre	ete:	Properties	of fresh	1	-	
	conci	rete-	Workability	– diff	erent	tests o	f wo	orkability-	Factors	5		
II	influe Relat	encing	workability. 1	ests or differe	n harde	ened con	crete	as per IS	- codes fluencing	8		CO2
	stren	gth.	יך הפנאפפון		AIL 311	Griguis	- 10			,		
	Desi	gn of	Concrete Mi	i <b>x:</b> Vari	ous cla	issical m	netho	ds of cond	crete mix	(	+	
111	desig	n, I.S	. code metho	d, basic	consic	derations	and	factors in	luencing	9		CO3
	mixes	s with	Surkhi and of	ther Po	zzolani	c materia	als.	concrete,	concrete			000
	Prod	uctio	n and Quality	y Contr	ol of C	oncrete	: Pro	duction of	crushed	1	+	
	stone	e aggr	egate, batchi	ng equ	ipments	s for pro	ducti	on and co	ncreting			
IV	curin weat	g at o her co	anterent tempondition, statis	erature stical au	es, Cor Jality co	ncreting ontrol. fie	unae eld co	erwater no ontrol. Inst	ection 8	1 8		CO4
	Testi	ng of	Concrete.							-		
	Spec	ial C	oncretes: L	ight we	eight c	oncrete,	Rea	ady mix o	concrete	,		
V	Ferro		ent, Fiber	reinfor	ced (		, P	olymer	concrete			CO5
, in the second se	conci	rete, N	Mass concrete	e, Temp	erature	e control	of m	ass concre	ete.	·   ·		
Guest Lect	ures (it	f anv)								_	+	
<b>T</b> - ( - ) )	'e									40	)	

Suggestive list of experiments:										
1. Testing of Cement: Consistency of cer	nent, initial and final setting time, Fineness and									
Specific Gravity of cement.										
2. Testing of fine aggregate: Specific Gra	avity, sieve analysis and zoning, bulking of fine									
aggregate, bulk density, silt content.										
3. Testing of coarse aggregate: Specific Gr	avity, sieve analysis, water absorption & moisture									
content.										
4. Concrete Mix design by IS code method	as per IS:10262-2019 & IS:456-2000)									
5. Lests on Concrete- Workability tests – Slump cone test, compaction factor test, Vee-Bee										
consistometer test, strength tests- compressive strength, flexural strength, split tensile										
Stiengin.										
1 Properties of Concrete – A M Nevelli – 5	th Ed. Prentice Hall Publishers, 2012									
2 Concrete Technology – M. S. Shetty – S	Chand Co. Publishers $= 2006$									
2. Concrete Technology M. I. Gambh	ir Tata McGraw Hill Publishers 2012									
S. Coherete reenhology – W. E. Gamon	m = 1 at a WeOraw Hill 1 ublishers = 2012.									
1 Concrete Technology P.S. Varshney	Oxford& IBH publishing co									
1. Concrete rechnology – R.S. varsniney –	Oxford& Ibi i publishing co.									
2. Hand books on Materials & Technology -	Published by BMTPC & HUDCO									
3. Mohan Rai& M.P. Jai Singh; Advances in	Building Materials & Construction									
4. IS:456 (2000)										
5. IS:10262 (2019)										
Modes of Evaluation and Rubric										
Quiz, Assignment, Midterm exam, End term exan	and Practical Viva.									
Rubric: End term exam. Practical: 50% Quiz and	50% Viva.									
List/Links of e-learning resource										
https://nptel.ac.in/courses/105/102/105102012/										
https://nptel.ac.in/courses/105/104/105104030/										
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Recommendation by Board of studies on	08-06-2023									
Approval by Academic council on										
Compiled and designed by										
Subject handled by department	Civil Engineering Department									

SAMRAT ASHOK TECHNOLOGICAL INSTITUTE												
E CAD	(Engineering College), VIDISHA M.P.											
and the	and		(An	Autono	omous	Institute	Affiliate	ed to RGP∖	/ Bhopa	al)		
VIDISHA M.P.	2				CIVII		SINEE	RING		-		
Semester/Y	ear		/		Pro	gram	o. o.t		B.T	ech		
Category	OE	Su	bject Code:	OE-305 Subject Road Safety E				' Eng	Engineering			
	-	Theer	Maximum N	Marks Allotted Contac				act H	ours	Total		
End Oran		rneor	y A i	0	End	Lab-		Total		-		Credits
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60	20		10	10	-	-	-	100	3	-	-	3
Prerequisit	es:											
Basic know	ledge o	n Ro	ad safety Eng	jineerin	g.							
Course Ob	jective:			****	- fati			d a a a u a i a t	440.000		<u>a. (a)</u>	unting of
safetv haza	the ba ardous l	sic k ocatio	nowledge on	road s dial roa	satety Id safe	enginee tv meas	ring an ures.	d acquaint	tnem	with	eval	uation of
Course Ou	tcomes:					tj meae						
After the co	ompletic	on of t	he course the	e stude	nt shou	uld be at	ole to					
1.Able to a analysis.	icquire l	know	ledge method	s and a	applica	ition of r	oad safe	ety enginee	ering ar	id ac	cider	nt
2.Able to r	ememb	er the	e process of re	oad saf	ety au	dit and t	he mea	sures of im	proving	, road	d safe	ety.
3. Able to	Qualifie	d to e	evaluate the e	ffective	ness o	of variou	s mana	nement tec	hniaue	s ado	opted	, Lin
reducing ro	ad acci	dents	3				,	<u> </u>				
UNITs	Descriptions Hrs. C											
				D	escrip	tions				ŀ	lrs.	CO's
	Introdu	uctior	to Road safe	D ety:	escrip	tions				ŀ	Irs.	CO's
	Introdu Road	uction accio	n to Road safe dents, Trends	Dety:	<u>escrip</u> es, Co	tions ollision d	liagram	s; Highway	safety	/;	Irs.	CO's
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V	Remedial safety Measures: Accident prevention by better planning design of roads, Accident remedial me accident control measures, Highwa construction, Highway geometry and Public transport and safety; Road safe involvement; Road safety law.	8	CO3							
Guest Lec										
Total Hou		40								
<ul> <li>I ext Book-</li> <li>1. C. Jotin Kishty&amp; B. Kent Lall, Transportation Engineering-An Introduction, Thrid Edition, Prentice Hall of India Private Limited, New Delhi, 2006</li> </ul>										
2. Kh	anna and Justo, Text book of Highway Er	ngineering, Nemchand Brothers, R	oorkee	).						
3. Ge Ro 4. ns Sa 5.	<ol> <li>GeetamTiwari and Dinesh Mohan, Transport Planning and Traffic Safety: Making Cities, Roads, and Vehicles Safer, CRC Press, 2016.B.C. Punmia; Building Construction.</li> <li>nstitute of Transportation Engineers (ITE), The Traffic Safety Toolbox: A Primer on Traffic Safety, ITE, 1999.</li> </ol>									
Reference 6. J. 7. Ez (re 8. Atl (D	<ol> <li>5.</li> <li>Reference Books-</li> <li>6. J. Stannard Baker, Traffic Collision Investigation, Northwestern University Center for Public Safety, 2002.</li> <li>7. Ezra Hauer, Observational Before-After Studies in Road Safety, Pergamon Press, 1997 (reprinted 2002).</li> <li>8. AthelstanPopkess, Traffic Control and Road Accident Prevention, Chapman and Hall, 1997 (Digitized 2008)</li> </ol>									
Modes of E	Evaluation and Rubric									
Quiz, Assig Rubric: En	gnment, Midterm exam, End term exam ar d term exam. Practical: 50% Quiz and 50%	nd Practical Viva. % Viva.								
List/Links of	of e-learning resource									
https://npte	el.ac.in/courses/105/105/105105215/									
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