				SI	CHEME	FORIE	ARNING	Branch Co	de	Course C	ode	CO Code	LO Code	
RGPV	/ (Diplo	ma Wing	) Bhopal	5.		UTCON		С03	3	0	2	1	1	Format No.
					U	UICON		C05			2		-	
COURS	E NAME	SURVEYING												
CO Des	cription	Explain the bas	sics of surveying	and ap	ply the prin	ciples of ch	ain surveying to m	ake the surve	ey plans.					
LO Des	cription	Explain basics	of surveying and	d use of	fequipment	s in chain s	urveying.							
		1				SCHEN	AE OF STUDY							
S. No.		Learning C	ontent		Method teachi		scription of T-L Process	Teach Hrs.	Pract. /Tut Hr		LRs R	equir	ed	Remarks
01.	surveyin Classifica Primary Seconda Object & Principle Study and surveying	efinition, Object, Principles and Scope of		Interactive classroom teaching, quiz,Teacher will expla the contents and provide handouts the students; teaching, quiz, presentation.Interactive the contents and provide handouts the students; teaching will conduct a qui to practice their		contents and vide handouts to students; teacher conduct a quiz give assignments practice their	4	0	Chalk board, PPT, text book, video film.				NIL	
						SCHEME	OF ASSESSMENT	Г						
S. No.		od of Esment	Description of	Asses	ssment	Maximu Marks	Passin	g Criteria	F	lesou	rces F	Requi	red	External / Internal
01.	Exam-pa		tudent will be as rveying and use chain sur	of equi	pments in	8	Test Paper	+ Rating sca			, chalk ook, vi			External
	te	est				RUCTION	S FOR THE HOD	/ FACULTY	(IF ANY)					

					NIL								
			SCHE	ME FOR	R LEAR	NING	Branch Co	de C	ourse Co	ode	CO Code	LO Code	
KGPV		oma Wing ) Bhopal		OUTC	OME		C 0	3 3	0	2	1	2	Format No. <b>4</b>
COURS	E NAME	SURVEYING				I	I	II	1		1		1
CO Des	cription	Explain the basics of surveyir	ng and apply th	ne principles	of chain su	rveying to mal	ke the surve	y plans.					
LO Des	cription	Describe different terminolo	gy and operati	ons of chain	surveying.								
		1		SC		STUDY							
S. No.		Learning Content		Method of teaching	-	tion of T-L ocess	Teach Hrs.	Pract. /Tut Hrs	5.	LRs Re	quire	d	Remarks
01.	Chaining- Different check line long, shor Survey sta affecting Obstacles Errors in o	Direct and indirect Ranging plain and sloping ground. types of chain lines-Survey lin e, tie lines and Base line Offsets rt. ation and their selection, Facto the selection of survey station. in chaining & oblique. chain surveying & applying Cor ape (Numerical problems).	e, 5- rs	Interactive classroom teaching, assignmen ts, quiz, presentati on.	the conte provide h the stude will condu	andouts to nts; teacher uct a quiz assignments e their	6	0	t	chalk bo ext boo ilm.			NIL
			I	SCHE	ME OF AS	SESSMENT							
S. No.		od of Description of	of Assessme	nt	kimum larks	Passing	Criteria	R	esou	rces Re	equire	d	External / Internal

01.	External :End sem Exam-pan paper test	Student will be asked to different terminology and operations of chain surveying.	12	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, video film.	External
		ADDITIONAL INSTR		DR THE HOD/ FACULTY (IF A	NY)	
			N	IL		

		SCHEME FOR	R LEARNING	Bra	nch Coo	le	Course Code		de	CO Code	LO Code	
RGPV (Diplo	oma Wing ) Bhopal	OUTC	OME	С	0	3	3	0	2	1	3	Format No. <b>4</b>
COURSE NAME	SURVEYING											
CO Description	Explain the basics of surveying	and apply the principles	of chain surveying to ma	ke the	surve	y plan	s.					
LO Description	Determine the distance with ch	nain and tape on the grou	und and the area of the f	ield.								
	·	sc	HEME OF STUDY									
S. No.	Learning Content	Method of teaching	Description of T-L Process	Tea Hr	-		ract. It Hrs	5.	LRs R	equire	d	Remarks

01.	of a field (Numerical Plotting of field note Use of conventional	S	Interacti classroon teaching assignme quiz, presenta	m t ;, p ents, t v ition. a	he conte provide h he stude vill cond		4	0	Chalk board, PPT, text book, video film.	NIL
			SCHEME OF		E OF A	SSESSMENT				
S. No.	Method of Assessment	Description of Asses	sment	Maxir Maı	-	Passing	Criteria	Res	ources Required	External / Internal
01.	Internal: mid sem exam- Pen Paper Test/assignment/ quiz	Student will be asked to D the distance with chain an the ground and the area of	d tape on	8		Test Paper +	Rating scale		uts, chalk board, PPT, t book, video film.	Internal
		ADDITIO	NAL INST	RUCTIO	NS FOI	R THE HOD/ F	FACULTY (IF	· ANY)		
					NI	L				

		SCHEME FOR LEARNING	E	Branch Co	de	Co	ourse Co	de	CO Code	LO Code	л
	ma Wing ) Bhopal	OUTCOME	С	0	3	3	0	2	1	4	Format No. <b>4</b>
COURSE NAME	SURVEYING										
CO Description	Explain the basics of surveying	and apply the principles of chain surveying to m	ake th	e surve	ey plan	s.					

				SCHEME C	OF STUDY				
S. No.	Lear	ning Content	Method teachir		iption of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
01.	tape on ground with	distance with chain and n direct/indirect ranging.(3) ross staff, optical square and	Lab demonstra , hands on practice, la assignmen	ation the co provide ab studen	er will explain ntents and e handout to ts. Students rn through e.	0	6	Handouts, chalk board, PPT, manual, virtual lab	NIL
	1		S	CHEME OF A	SSESSMENT	1	1	11	
S. No.	Method of Assessment	Description of Assess	ment	Maximum Marks	Passing	; Criteria	Res	ources Required	External / Internal
01.	Internal :Laboratory Assessment- Task /Experiment performance in Laboratory	Students will be asked to M the distance and taking offs different instruments chain cross staff/optical square.	ets using		Rating sca	ale/ Rubrics	Lab r	ecord/ rating scales	Internal
	·	ADDITION		UCTIONS FO	R THE HOD/	FACULTY	(IF ANY)		<u>'</u>
		Part of F	Practical Exa	am : Internal	Marks for Pra	ictical : 02	Marks		

RGPV (Diploma Wing ) Bhopal SCHEME FOR LEARNING

Branch Code

Course Code Code Code Code Code

LO Code Format No **4** 

			Οι	JTCOME		C 0	3 3	0 2 2 1	
	SURVEY	ING			· · ·		· · · · ·		•
ription	Perform t	raversing using chain and com	ipass surve	ey.					
ription	Explain b	pearing system, terminolo	ogy and v	vorking of c	ompass survey				
				SCHEME	OF STUDY				
	Learn	ing Content	of	Desc	•	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
Bearing of I arbitrary m bearing. Systems of quadrantal Calculate in Prismatic co use. Numer	ines, Meri eridian, Be bearings- bearing, C ncluded an ompass co rical proble	idian— True, magnetic and earing — fore bearing, back whole circle bearing & Conversion of bearing. gles from bearings. omponent, construction and	classroo teaching assignm quiz,	om the co g, provid ients, the st will co ation and gi to pra	ontents and le handouts to udents; teacher onduct a quiz ve assignments ctice their	6	0	Chalk board, PPT, text book, video film.	NIL
			S	SCHEME OF	ASSESSMENT				
		Description of Assess	ment	Maximum Marks	Passing	Criteria	Res	ources Required	External Internal
Exam-pan	n paper		0	12	Test Paper +	- Rating scal	tex		External
	ription ription Principle of Bearing of l arbitrary m bearing. Systems of quadrantal Calculate ir Prismatic co use. Numer bearing, an Methor Assessi External :E Exam-par	ription Perform to ription Explain to Learn Principle of Compass Bearing of lines, Meri arbitrary meridian, Be bearing. Systems of bearings- quadrantal bearing, C Calculate included an Prismatic compass co	riptionPerform traversing using chain and commissionriptionExplain bearing system, terminologicLearning ContentPrinciple of Compass surveyBearing of lines, Meridian- True, magnetic and arbitrary meridian, Bearing – fore bearing, back bearing.Systems of bearings- whole circle bearing & quadrantal bearing, Conversion of bearings. Prismatic compass component, construction and use. Numerical problems on calculation of bearing, angles.Method of AssessmentDescription of AssessExternal :End sem Exam-pan paperStudent will be asked to be system, terminology and work	ription Perform traversing using chain and compass surver ription Explain bearing system, terminology and v Learning Content Method Principle of Compass survey Bearing of lines, Meridian– True, magnetic and arbitrary meridian, Bearing – fore bearing, back bearing. Systems of bearings- whole circle bearing & quadrantal bearing, Conversion of bearing. Calculate included angles from bearings. Prismatic compass component, construction and use. Numerical problems on calculation of bearing, angles. Method of Assessment Description of Assessment External :End sem Exam-pan paper Student will be asked to bearing system, terminology and working of	ription Perform traversing using chain and compass survey. ription Explain bearing system, terminology and working of constraints of the constrai	ription       Perform traversing using chain and compass survey.         ription       Explain bearing system, terminology and working of compass survey         scheme       Scheme       Scheme         Learning Content       Method of teaching       Description of T-L Process         Principle of Compass survey Bearing of lines, Meridian- True, magnetic and arbitrary meridian, Bearing – fore bearing, back bearing.       Interactive classroom teaching, assignments, quiz, presentation       Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.         Method of bearing, angles.       Description of Assessment       Maximum Marks       Passing         Method of Assessment       Student will be asked to bearing system, terminology and working of       12       Test Paper 4	ription Perform traversing using chain and compass survey. ription Explain bearing system, terminology and working of compass survey. SCHEME OF STUDY           Learning Content         Method of teaching         Description of T-L Process         Teach Hrs.           Principle of Compass survey         Interactive classroom arbitrary meridian, Bearing – fore bearing, back bearing.         Interactive classroom teaching, assignments, systems of bearings- whole circle bearing & quadrantal bearing, Conversion of bearing. Calculate included angles from bearings. Prismatic compass component, construction and use. Numerical problems on calculation of bearing, angles.         Interactive classroom teaching, assignments, presentation         Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.         6           Method of Assessment         Description of Assessment         Maximum Marks         Passing Criteria           External :End sem Exam-pan paper         Student will be asked to bearing system, terminology and working of         12         Test Paper + Rating sca	Perform traversing using chain and compass survey.         ription       Explain bearing system, terminology and working of compass survey.         SCHEME OF STUDY         Learning Content       Method of teaching       Description of T-L Process       Teach Hrs.       Pract. /Tut Hrs.         Principle of Compass survey Bearing of lines, Meridian- True, magnetic and arbitrary meridian, Bearing - fore bearing, back bearing.       Interactive classroom teaching, systems of bearings- whole circle bearing & quadrantal bearing, Conversion of bearing. Calculate included angles from bearings. Prismatic compass component, construction and use. Numerical problems on calculation of bearing, angles.       Interactive classroom teaching, presentation .       Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.       6       0         Method of Assessment       Description of Assessment       Maximum Marks       Passing Criteria       Res         Ketternal :End sem Exam-pan paper       Student will be asked to bearing system, terminology and working of       12       Test Paper + Rating scale       Handou tex	Perform traversing using chain and compass survey.         Interaction       Explain bearing system, terminology and working of compass survey.         SCHEME OF STUDY       SCHEME OF STUDY         Learning Content       Method of teaching       Description of T-L Process       Teach Hrs.       Pract. /Tut Hrs.       LRs Required         Principle of Compass survey Bearing of lines, Meridian– True, magnetic and arbitrary meridian, Bearing – fore bearing, back bearing. Systems of bearings- whole circle bearing & quadrantal bearing, Conversion of bearing. Calculate included angles from bearings. Prismatic compass component, construction and use. Numerical problems on calculation of bearing, angles.       SCHEME OF ASSESSMENT       SCHEME OF ASSESSMENT         Method of Assessment       Description of Assessment       Maximum Marks       Passing Criteria       Resources Required Handouts, chalk board, PPT, text book, video film.

NIL	

	/ (Dinlo	oma Wing ) Bhopal	<b>SCHEME</b>	FOR LEAR	NING	Branch Co	de Cours	se Code	CO Code	LO Code	Format No.
			OL	JTCOME		C 0	3 3	0 2	2	2	FORMAL NO.
COURS	SE NAME	SURVEYING									
CO Des	cription	Perform traversing using chain	and compass surve	у.							
LO Des	cription	Calculate corrected angles afte	r elimination of loca	al attraction.							
		1		SCHEME O	F STUDY						
S. No.		Learning Content	Meth of teach	Descrip	otion of T-L rocess	Teach Hrs.	Pract. /Tut Hrs.	LRs Ro	equire	ed	Remarks
01.	to avoid i to local at	action- causes, precautions to be t and correction of bearing affect ttraction. Il problem on local attraction.	ed due classro teachin assignn ts, quiz presen on.	om the content of provide h nen the stude , will cond tati and give to praction knowled	handouts to ents; teacher uct a quiz assignments ce their ge.	4	0	Chalk bo text boo film.			NIL
	Meth	nod of		CHEME OF A Maximum	SSESSMENT						External /
S. No.		sment Description of	Assessment	Marks	Passing	; Criteria	Res	ources R	equire	ed	Internal

01.	External :End sem Exam-pan paper test	Student will be asked to Calculate corrected angles after elimination of local attraction.	8	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, video film.	External
		ADDITIONAL INSTR		DR THE HOD/ FACULTY (IF A	NY)	
			N	II <b>L</b>		

		SCHEME FOR	R LEARNING	Branch Co	de	Co	ourse Co	se Code		LO Code	
RGPV (Diplo	oma Wing ) Bhopal	OUTC	ΟΜΕ	C 0	3	3	0	2	2	3	Format No. <b>4</b>
COURSE NAME	SURVEYING										
CO Description	Perform traversing using chain	and compass survey.									
LO Description	Explain traversing and plotting	the details.									
	·	sc	HEME OF STUDY								
S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pra /Tut			.Rs R	equire	d	Remarks

01.	closed traverse, chect traverse and graphica errors.	nd compass, open and k on open and closed al adjustment for closing sing conventional signs.	Interactiv classroon teaching, assignme quiz, presenta	n the cont provide ents, the stud will cond		3	0	Chalk board, PPT, text book, video film.	NIL
	1			SCHEME OF A	SSESSMENT	I I		· · · · · ·	
S. No.	Method of Assessment	Description of Asses	sment	Maximum Marks	Passing	Criteria	Res	ources Required	External / Internal
01.	Internal: mid sem exam- Pen Paper Test/assignment/ quiz	Student will be asked to traversing and plotting th	· ·	6	Test Paper +	+ Rating scale		uts, chalk board, PPT, t book, video film.	Internal
		ADDITIO	NAL INSTF	RUCTIONS FO	R THE HOD/	FACULTY (IF /	ANY)		
				N	L				

		SCHEME FOR LEARNING	В	ranch Co	de	Ca	ourse Co	de	CO Code	LO Code	
	oma Wing ) Bhopal	OUTCOME	С	0	3	3	0	2	2	4	Format No. 4
COURSE NAME	SURVEYING										
CO Description	Perform traversing using chain	and compass survey.									

			SC		F STUDY				
S. No.	Learr	ning Content	Method of teaching	Descri	ption of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
01.	<ul> <li>1. Use of prismatic compass and measuring fore bearing and back bearing of 5-6 side closed polygon. Identifying station affected by local attraction and calculation of corrected fore bearing and back bearing.(3)</li> <li>2. Measuring fore bearing and back bearing for an open traverse (5-6 sides), calculate direct angles between successive lines.(3)</li> <li>3. Measurement of fore bearing, back bearing an length of lines of a 5- 6 side closed traverse. Calculation of included angles, locating details, plotting them and adjustment of closed error graphically.(6)</li> </ul>		Lab demonstrati on, hands on practice, lab assignments	Teacher will explain ti the contents and provide handout to , students. Students will learn through		0	12	Handouts, chalk board, PPT, manual, virtual lab	NIL
			SCHE	ME OF A	SSESSMENT				
S. No.	Method of Assessment	Description of Assessn	nent	kimum arks	Passing	Criteria	Res	ources Required	/ External Internal
01.	Internal :Laboratory Assessment- Task /Experiment performance in Laboratory	Student will be asked to Pe traversing and measure bearings and angles using co	the		Rating sca	le/ Rubrics	Lab r	ecord/rating scales	Internal

COURSE NAME SUF	a Wing ) Bhopal	OUTC	OME	C 0	3 3	0 2	3 1	Format No. 🗸
CO Description App	RVEYING					_	<u> </u>	
• • •								
O Description Expl	oly basic techniques and e	ngineering tools for le	eveling.					
<b>-</b>	lain basics of leveling and w	orking of Auto level.						
· · · · ·		SC	CHEME OF STUDY					
S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Re	quired	Remarks
leveling – Leve line, Vertical li Bench mark ar Study and use Auto level –Co sight, Line of C temporary adj Fundamental Leveling Staff Foresight, bac	e of tilting level and dumpy le omponents, Construction, Li Collimation, Bubble tube axi ljustment of auto level. axes and their relationship – Telescopic and folding. ck sight, Intermediate sight, of collimation (height of	ntal classroom ed level, teaching, assignmen evel. ts, quiz, ine of presentati is, on.	Teacher will explain the contents and provide handouts to the students; teacher will conduct a quiz and give assignments to practice their knowledge.	6	0	Chalk boa text book film.		NIL

S. No.	Method of Assessment	Description of Assessment	Maximum Marks	Passing Criteria	<b>Resources Required</b>	External / Internal
01.	External :End sem Exam-pan paper test	Student will be asked to Explain basics of leveling and working of Auto level.	12	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, video film.	External
		ADDITIONAL INST	RUCTIONS FO	R THE HOD/ FACULTY (IF A	NY)	
			NI	L		

		SCHEME FOR	R LEARNING	Branch Co	de	Co	ourse Co	de	CO Code	LO Code	
RGPV (DIPI	oma Wing ) Bhopal	OUTC	OME	C 0	3	3	0	2	3	2	Format No. <b>4</b>
COURSE NAME	SURVEYING										
CO Description	Apply basic techniques and e	ngineering tools for le	veling.								
LO Description	Calculate R.L. by different meth	nods									
		SC	HEME OF STUDY								
S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.		ract. It Hrs		.Rs R	equire	d	Remarks

01.	instrument method	on of levels – Height of and Rise and fall method. , Numerical problems. ssing readings.	Interacti classroo teaching assignme quiz, presenta	m g, ents,	the cont provide the stud will cond		5	0	Chalk board, PPT, text book, video film.	NIL
		1		SCHE	ME OF A	SSESSMENT				
S. No.	Method of Assessment	Description of Asses	sment		ximum Iarks	Passing	Criteria	Res	ources Required	External / Internal
01.	External :End sem Exam-pan paper test	Student will be asked to ( R.L. by different metl			10	Test Paper +	- Rating scale	tex	uts, chalk board, PPT, t book, video film.	External
		ADDITIO	NAL INST	RUCT	IONS FO	R THE HOD/	FACULTY (I	F ANY)		
					NI	L				

		SCHEME FOR LEARNING	В	ranch Co	de	Co	ourse Co	de	CO Code	LO Code	
	ma Wing ) Bhopal	OUTCOME	С	0	3	3	0	2	3	3	Format No. 4
COURSE NAME	SURVEYING										
CO Description	Apply basic techniques and e	engineering tools for leveling.									

				SCHEME	OF STUDY				
S. No.	Lear	ning Content	Methoo teachi		iption of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
01.	profile, cross section Plotting L-section 8	leveling, precautions and	Interactiv classroon teaching, assignme quiz, presentat	ve Teache n the con provide ents, the stud will con tion. and giv	r will explain atents and a handouts to dents; teacher aduct a quiz e assignments tice their dge.	4	0	Chalk board, PPT, text book, video film.	NIL
	1			SCHEME OF	ASSESSMENT	1	1		
S. No.	Method of Assessment	Description of Asses	sment	Maximum Marks	Passing	g Criteria	Res	ources Required	External / Internal
01.	Internal: mid sem exam- Pen Paper Test/assignment/ quiz	Student will be asked to different types of leveling in leveling.	•	10	Test Paper -	+ Rating scal	tex	uts, chalk board, PPT, t book, video film.	Internal
		ADDITIO	NAL INSTF	RUCTIONS FO	OR THE HOD/	FACULTY	(IF ANY)		
				N	IIL				

RGPV (Diploma Wing ) Bhopal SCHEME FOR LEARNING

Course Code Code Code Fo

LO Code Format No **4** 

								Ol	UTC	OME		C (		3	3	0	2	3	4		
E NAME	SURVEY	ING									· · ·	i									
cription	Apply bas	sic te	echnic	ques	and	enginee	ering	tools	for le	veling.											
cription					•		· · ·			-	ction.										
									SC	CHEME C	OF STUDY										
	Lear	ning	; Con	ten	t			of	f		•			-		l	.Rs Ro	equire	ed		Remarks
taking rea field book 2. Differen R.L. by H.I 3. Carryin another b 4. Runnir length of cross sec	king reading on levelling staff and record on Id book.(3) Differential leveling practice, calculation of by H.I. and rise and fall methods.(6) Carrying bench mark from one station to other by fly levelling with Auto Level.(6) Running longitudinal section for a road on the of 500m and take pss section suitably. Plotting plan, L-section		d on demonstr ation, hands on practice, lab on to assignmen ts a road of		the contents and provide handout to students. Students will learn through practice.		0		27		b m	oard, F Ianual,	PPT,			NIL					
							I	9	SCHE	ME OF A	ASSESSMENT		I			I			1		
		6	Desci	ripti	on o	f Asses	sme	ent	-	-	Passing	g Criteri	a		Re	sour	ces R	equir	ed		External / Internal
:Laborat Assessm /Experin perform	tory nent- Task ment nance in	th di set	e R. L fferer ting o	. Usint me ut b	ng au ethod ench	to level s, mark ar	by nd plo	otting			Rating sca	ale/ Rubr	CS		Lab	o reco	rd/rat	ing sca	les		Internal
	1. Use of a taking rea field book 2. Differe R.L. by H. 3. Carryin another H 4. Runnin length of cross sec and C-se Meth Asses Internal :Laborat Assessm /Experin perform	cription       Apply base         cription       Determing setting of setting on level, taking reading on level, taki	Cription       Apply basic termine the setting out basic termine taking reading on levelling field book. (3)         1. Use of Auto level, tempt taking reading on levelling field book. (3)       Image: Comparison of the setting out basic termine termi	criptionApply basic techniccriptionDetermine the R. L setting out benchLearning Con1. Use of Auto level, temporary taking reading on levelling staff field book.(3)2. Differential leveling practice, R.L. by H.I. and rise and fall me 3. Carrying bench mark from another by fly levelling with A 4. Running longitudinal se length of 500m and take cross section suitably. Plottin and C-section.(12)Method of AssessmentDescr the R. L different performance in	criptionApply basic techniquescriptionDetermine the R. L. Usi setting out bench markLearning Contem1. Use of Auto level, temporary adju taking reading on levelling staff and field book.(3)2. Differential leveling practice, calc R.L. by H.I. and rise and fall method 3. Carrying bench mark from one another by fly levelling with Auto 4. Running longitudinal section length of 500m and take cross section suitably. Plotting pla and C-section.(12)Method of AssessmentDescripti the R. L. Usi different me setting out b - plan L-section	criptionApply basic techniques and Determine the R. L. Using au setting out bench mark andcriptionDetermine the R. L. Using au setting out bench mark andLearning Content1. Use of Auto level, temporary adjustme taking reading on levelling staff and reco field book.(3)2. Differential leveling practice, calculation R.L. by H.I. and rise and fall methods.(6)3. Carrying bench mark from one stat another by fly levelling with Auto Leve 4. Running longitudinal section for length of 500m and take cross section suitably. Plotting plan, L- and C-section.(12)Method of AssessmentDescription oInternal :Laboratory Assessment-Task /Experiment performance inStudent will be as the R. L. Using au different method setting out bench - plan L-section and	Apply basic techniques and engineer         Determine the R. L. Using auto level setting out bench mark and plotting         Learning Content         Learning Content         Learning Content         Learning content         Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)         Differential leveling practice, calculation of R.L. by H.I. and rise and fall methods.(6)         Carrying bench mark from one station to another by fly levelling with Auto Level.(6)         Running longitudinal section for a road length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)         Method of Assessment       Description of Assess         Internal       Student will be asked to I the R. L. Using auto level different methods, setting out bench mark ar - plan L-section and C- section and C -	Apply basic techniques and engineering         Determine the R. L. Using auto level by disetting out bench mark and plotting - plate         Learning Content         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)         2. Differential leveling practice, calculation of         R.L. by H.I. and rise and fall methods.(6)         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)         4. Running longitudinal section for a road of length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)         Method of Assessment       Description of Assessment         Internal :Laboratory       Student will be asked to Deter the R. L. Using auto level by different methods, setting out bench mark and plot out bench mark and	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools         Determine the R. L. Using auto level by different setting out bench mark and plotting - plan, L-see         Learning Content       Method of         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab         2. Differential leveling practice, calculation of       practice         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)       assign assign ts         4. Running longitudinal section for a road of length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)       Description of Assessment         Method of Assessment       Student will be asked to Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section an	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leternine the R. L. Using auto level by different meth setting out bench mark and plotting - plan, L-section and setting out bench mark and plotting - plan, L-section and setting out bench mark and plotting - plan, L-section and fall setting out bench mark and plotting - plan, L-section and c-section.(12)         Internal :Laboratory Assessment Task / Experiment performance in performance in       Survey Surve	CriptionApply basic techniques and engineeringtools for leveling.CriptionDetermine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- secCriptionLearning ContentMethod of teaching1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)Lab Lab demonstr ation, hands on provide hands on practice, lab assignmen tsTeacher the con provide hands on practice, lab assignmen ts2. Differential leveling practice, calculation of another by fly levelling with Auto Level.(6)Lab demonstr ation, hands on practice, lab assignmen tsTeacher the con provide hands on practice, lab assignmen tsMethod of AssessmentDescription of AssessmentMaximum MarksInternal :Laboratory Assessment- performance inStudent will be asked to Determine 	SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         SCHEME OF STUDY         Learning Content       Method of teaching       Description of T-L Process         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab       Teacher will explain the contents and provide handout to students. Students         2. Differential leveling practice, calculation of R.L. by H.I. and rise and fall methods.(6)       Lab       Teacher will explain the contents and provide handout to students. Students will learn through practice, lab         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)       assignmen ts       SCHEME OF ASSESSMENT         Method of Assessment       Description of Assessment       Maximum Marks       Passing         Internal :Laboratory Assessment Tark       Student will be asked to Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - lan Lisection and C-section       Rating sca	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         betermine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         setting out bench mark and plotting - plan, L-section and C- section.         CHEME OF STUDY         Learning Content       Method of teaching       Description of T-L Process       Teach Hrs.         1. Use of Auto level, temporary adjustment, taking reading on leveling staff and record on field book.(3)       Lab demonstr ation, hands on practice, calculation of R.L. by H.I. and rise and fall methods.(6)       Teacher will explain the contents and provide handout to students. Students will learn through practice.       0         4. Running longitudinal section for a road of length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)       SCHEME OF ASSESSMENT       Maximum Marks         Method of Assessment       Description of Assessment       Maximum Marks       Passing Criteria section and C- section.         Internal ::Laboratory Assessment       Student will be asked to Determine the R. L. Using auto level by different methods, setting out bench mark and plotting setting out bench mark and p	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section.       Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section.         Comparison of teaching       Method of teaching       Description of T-L teaching       Teach Hrs.         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab       Teacher will explain the contents and provide handout to students. Students       0         2. Differential leveling practice, calculation of R.L. by H.I. and rise and fall methods.(6)       Description of a road of length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)       Teacher will explain the contents and provide handout to students will learn through practice.       0         Method of Assessment       Description of Assessment       Teacher will explain the contents and provide handout to students. Students will be asked to Determine the R. L. Using auto level by different methods, setting out bench mark and plotting will be asked to Determine the figure transformance in performance in the R. L. Using auto level by different methods, setting out bench mark and plotting explane the R. L. Using auto level by different methods, setting out bench mark and plotting explane the receiption and C-section contex coresection suitably. Plotting plan, L-section and C-secti	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         SCHEME OF STUDY         Learning Content       Method of teaching       Description of T-L Process       Teach Hrs.       Pra         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab       Teacher will explain the contents and provide handout to students. Students       0       2:         2. Differential leveling practice, calculation of R.L. by H.I. and rise and fall methods.(6)       Student will be exiting plan, L-section and C-section.       0       2:         4. Running longitudinal section for a road of length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)       Description of Assessment       Maximum Marks       Passing Criteria         Internal ::Laboratory Assessment Task, / Experiment performance in performance in       Student will be asked to Determine the R. L. Using auto level by different methods, setting out bench mark and plotting performance in       Rating scale/ Rubrics	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         cription       Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         Comparison of the compari	ENAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         cription       Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C-section.         SURVEYING       Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C-section.         It use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab       Description of T-L Process       Teacher will explain the contents and provide handout to students. Students will learn through practice.       0       27       H the contents and provide handout to students. Students will learn through practice.       1         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)       4. Running longitudinal section for a road of length of 500m and take cross section.(12)       SCHEME OF ASSESSMENT       SCHEME OF ASSESSMENT         Method of Assessment       Description of Assessment       Maximum Marks       Passing Criteria       Resourt lab recording the section and C-section and posting section	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         cription       Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         CHEME OF STUDY       Setter of teaching       Pract. / Tut Hrs.       Pract. / Tut Hrs.       LRs Rd         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab       Teacher will explain of the contents and provide handout to suddnts. Students       0       27       Handou board, Fmanual, hands on practice, calculation of R.L. by H.I. and rise and fall methods.(6)       1. Students from one station to another by fly levelling with Auto Level.(6)       1. Students       Students. Students assignment to case section.       1. Students       0       27       Handou board, Fmanual, hands on practice, calculation of Practice, lab       0       27       Handou board, Fmanual, hands on practice, lab       0       27       Handou board, Fmanual, lab         2. Otifierential leveling practice, calculation of a road of length of 500m and take       Students, Leserton       15       Students       Students       Iab       27       Handou board, Fmanual, lab       Iab         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)       4       Namids on matcher section       Student will be asked to Determine thas       Student will be asked to Determine t	E NAME       SURVEYING         cription       Apply basic techniques and engineering tools for leveling.         cription       Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         SCHEME OF STUDY       Scheme the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.       Teach Hrs.       Pract. / Tut Hrs.       LRs Require         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab       Teacher will explain the contents and provide handout to sudents. Students will leant through practice.       0       27       Handouts, cha board, PPT, manual, virtue lab         2. Differential leveling practice, calculation of another by fly levelling with Auto Level.(6)       1. Section for a road of length of 500m and take cross section suitably. Plotting plan, L-section and C- section.       1. Sectifie OF ASSESSMENT       Maximum Marks       Passing Criteria       Resources Require Marks, ////////////////////////////////////	E NAME       SURVEYING         Apply basic techniques and engineering tools for leveling.         cription         Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         SCHEME OF STUDY         Learning Content       Method of teaching       Description of T-L Process       Teach Hrs.       Pract. /Tut Hrs.       LRs Required         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book (3)       Lab demostration, hands on practice, calculation of practice, dalculation of practice, manual, virtual lab       Teacher will explain the contents and practice, basis growthe handout to students. Students. Students. Students assignmen test       0       2.7       Handouts, chalk board, PPT, manual, virtual lab         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)       4.       assignmen ts       1.       1.       bescription of Assessment ts       Schemet of the section for a road of length of SO0m and take cross section suitably. Plotting plan, L-section and C-section.(12)       Schemet of Assessment test.       Maximum Marks       Passing Criteria       Resources Required         Internal ::aboratory Assessment Tosk //Experiment test. Luing auto level by different methods, setting out bench mark and plotting performance in a loss of the setting out bench mark and plotting performance in a loss of the setting out bench mark and plotting performance in a loss of the setting out bench mark and plotting performance in a loss of th	ENAME       SURVEYING         Apply basic techniques and engineering tools for leveling.         cription         Determine the R. L. Using auto level by different methods, setting out bench mark and plotting - plan, L-section and C- section.         SCHEME OF STUDY         Learning Content       Method of teaching         1. Use of Auto level, temporary adjustment, taking reading on levelling staff and record on field book.(3)       Lab demonstration, and so and fall methods.(6)       Teacher will explain of practice, calculation of practice, will learn through practice.       0       27       Handouts, chalk board, PPT, manual, virtual lab         3. Carrying bench mark from one station to another by fly levelling with Auto Level.(6)       1 ab       assignment ts       1 be         4. Running longitudinal section for a road of length of 500m and take cross section suitably. Plotting plan, L-section and C-section.(12)       Chetter of Assessment       Maximum Marks       Passing Criteria       Resources Required         Internal ::aboratory Assessment Toxk // Experiment to the R. L. Using auto level by different methods, setting out bench mark and plotting plan and c-section and C-secti

		ma Wing ) Bhanal	SCHEME F	OR LEAF	NING	B	Branch Co	de	Cou	urse Co	de	CO Code	LO Code	
KGPV		oma Wing ) Bhopal	OUT	ΓΟΜΕ		С	0	3	3	0	2	4	1	Format No. <b>4</b>
COURS	SE NAME	SURVEYING												
CO Des	cription	Apply basics of plane table surv	ey for making plan.											
LO Des	cription	Explain basics of plane table su	rvey and various ope	rations of pla	ne table survey	•								
		·		SCHEME C	F STUDY									
S. No.		Learning Content	Metho of teachin	Descri	otion of T-L rocess		each Hrs.		ract. It Hrs.	L	.Rs R	equire	d	Remarks
01.	required. Centering Situations	of plane table survey, Accessorie Setting out of plane table, Leveli and orientation. where plane table survey is used c Alidade.	ng, classroor teaching, d. Use of assignme ts, quiz, presenta on.	n the cont provide the stud will cond ti and give to practi knowled	handouts to ents; teacher luct a quiz assignments ce their ge.		3		0	te		oard, Pl ok, vide		NIL
			SC	HEME OF A	SSESSMENT									
S. No.		nod of sment Description of	Assessment	1aximum Marks	Passing	; Crit	teria		Re	sour	ces R	equire	ed	External / Internal

01.	Internal: mid sem exam- Pen Paper Test/assignment/ quiz	Student will be asked to Explain basics of plane table survey and various operations of plane table survey.	6	Test Paper + Rating scale	Handouts, chalk board, PPT, text book, video film.	Internal
		ADDITIONAL INSTR		DR THE HOD/ FACULTY (IF A	NY)	

RGPV (Diploma Wing ) Bhopal		SCHEME FOR	R LEARNING	Branch Code Cou			ourse Code		CO Code	LO Code	_
		OUTCOME C 0 3					0	0 2 4		2	Format No. <b>4</b>
COURSE NAME	SURVEYING										
<b>CO</b> Description	Apply basics of plane table surv	ey for making plan.									
LO Description	Describe various methods of pla	ane table survey.									
	·	sc	HEME OF STUDY								
S. No.	Learning Content	Method of teaching	Description of T-L Process	Teach Hrs.		ract. ut Hrs	.	LRs R	equire	d	Remarks

	Intersection, and Trav	lethods of plane table surveying – Radiation, tersection, and Traversing. Merits and emerits of plane table Surveying.		ttion, and Traversing. Merits and ts of plane table Surveying.		the conte provide h the stude will cond	dge.		0	Chalk board, PPT, text book, video film.	NIL	
				SCHEN	ME OF A	SSESSMENT						
S. No.	Method of Assessment	Description of Assessment Passi		Passing	Criteria	Res	ources Required	External / Internal				
01.	External :End sem Exam-pan paper test	Student will be asked to various methods of plar survey.			8	Test Paper +	- Rating scale		uts, chalk board, PPT, t book, video film.	External		
		ADDITIO	NAL INST	RUCTI	ONS FO	R THE HOD/ I	FACULTY (IF	ANY)				
					NI	L						

DCDV/(Dislama Wisc) Dhasal		SCHEME FOR LEARNING	B	Branch Co	de	Course Code			CO Code	LO Code	
	oma Wing ) BhopalOUTCOMEC0330243Format No. 4										
COURSE NAME	SURVEYING										
CO Description	Apply basics of plane table sur	vey for making plan.									

			S	CHEME C	F STUDY				
S. No.	Lea	Learning Content		Description of T-L Process         Teacher will explain the contents and provide handout to students. Students will learn through practice.         Teacher will explain the contents and provide handout to students. Students		Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Remarks
01.	<ol> <li>Plane table survey by radiation method.(3)</li> <li>Plane table survey by intersection method.(3)</li> <li>Plane table survey by traversing method and adjustment of closing error (if any) graphically.(6)</li> </ol>		Lab demonstr ation, hands on practice, lab assignmen ts			0	12	Handouts, chalk board, PPT, manual, virtual lab	NIL
									<b>–</b>
S. No.	Method of Assessment	Description of Assessn	ient	ximum ⁄larks	Passing	g Criteria	Reso	External / Internal	
01.	Internal :Laboratory Assessment- Task /Experiment performance in Laboratory	Student will be asked to Per plane table survey by diffe methods and plotting.	rent		Rating sca	ale/ Rubrics	Lab r	Internal	
		ADDITIONA		IONS FO	R THE HOD/	FACULTY	(IF ANY)		
		Part of Pr	actical Exam	: Internal	Marks for Pra	actical : 04	Marks		