RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA (DIPLOMA WING) BHOPAL P05 DIPLOMA IN PRODUCTION ENGINEERING

PART A:- PROCESS OF CURRICULUM DEVELOPMENT

LIST OF IDENTIFIED PROFESSIONAL ROLES

- 1. To apply knowledge of mathematics, science, and engineering.
- 2. To design and conduct experiments, as well as to analyze and interpret data. 3. To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 4. To function on multidisciplinary teams.
- 5. To identify, formulate, and solve engineering problems.
- 6. To understand professional and ethical responsibility.
- 7. To communicate effectively.
- 8. To understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- 9. To engage in lifelong learning.
- 10. To use the techniques, skills, and modern engineering tools necessary for engineering practice.

LIST OF SELECTED TERMINAL BEHAVIORS

- 1. To apply knowledge of mathematics, science, and engineering.
 - TB-1 To understand concepts of production drawing. (502)
 - TB-2 To understand the theory of projections. (502)
- 2. To design and conduct experiments, as well as to analyze and interpret data. NIL
- 3. To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

NIL

- 4. To function on multidisciplinary teams. NIL
- 5. To identify, formulate, and solve engineering problems
 - TB-1 To select & draw orthographic projections for various objects. (502)
 - TB-2 To select and draw sectional views of various machine components. (502)
 - TB-3 To draw assembly drawings of any component from detailed drawing. (502)
- 6. To understand professional and ethical responsibility NIL
- 7. To communicate effectively NIL
- 8. To understand the impact of engineering solutions in a global, economic, environmental, and societal context.

NIL

- 9. To engage in lifelong learning
 - TB-1 To draw multiple views of any object. (502)
 - TB-2 To draw sectional views of any object. (502)
 - TB-3 To draw threaded fasteners, welded joints and riveted joints. (502)
 - TB-4 To understand various types of couplings and bearings. (502)
 - TB-5 To draw production drawing of any object. (502)
 - TB- 6 To be able to interpret details from any production drawing. (502)

10.To use the techniques, skills, and modern engineering tools necessary for engineering practice. NIL

FRAMED COS FOR SELECTED TERMINAL BEHAVIORS

- 1. To apply knowledge of mathematics, science, and engineering.
 - TB-1 To understand concepts of production drawing. (502)
 - CO1: Describe dimensioning and draw multiview projection.
 - TB-2 To understand the theory of projections. (502)
 - CO1: Describe dimensioning and draw multiview projection.
- 2. To design and conduct experiments, as well as to analyze and interpret data.

NIL

- 3. To design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 4. To function on multidisciplinary teams. NIL
- 5. To identify, formulate, and solve engineering problems
- TB-1 To select & draw orthographic projections for various objects. (502)
- CO1: Describe dimensioning and draw multiview projection.
 - TB-2 To select and draw sectional views of various machine components. (502)
 - CO2: Concept of Sectional Views and draw Sectional Views.
 - TB-3 To draw assembly drawings of any component from detailed drawing. (502)
 - CO5: Prepare a production drawing.
- 6. To understand professional and ethical responsibility NIL
- 7. To communicate effectively NIL
- 8. To understand the impact of engineering solutions in a global, economic, environmental, and societal context.

NIL

- 9. To engage in lifelong learning
 - TB-1 To draw multiple views of any object. (502)
- CO1: Describe dimensioning and draw multiview projection.
 - TB-2 To draw sectional views of any object. (502)
 - CO2: Concept of Sectional Views and draw Sectional Views.
 - TB-3 To draw threaded fasteners, welded joints and riveted joints. (502)
 - CO3: Concept of Threaded joints, Welded Joints and Riveted joints.
 - TB-4 To understand various types of couplings and bearings. (502)
 - CO4: Describe Couplings and Bearings.
 - TB-5 To draw production drawings of any object. (502)
 - CO5: Prepare a production drawing.
 - TB- 6 To be able to interpret details from any production drawing. (502)
 - 10. To use the techniques, skills, and modern engineering tools necessary for engineering practice. NIL

CO GROUPING AND COURSE FORMATION

COURSE NAME: - PRODUCTION DRAWING (502)

(Total 100 Hrs., Total 100 Marks)

LIST OF COs:-

CO1: Describe dimensioning and draw multiview projection. (20 Hrs, 20 marks)

CO2: Concept of Sectional Views and draw Sectional Views. (20 Hrs, 20 marks)

CO3: Concept of Threaded joints, Welded Joints and Riveted joints. (15 Hrs, 15 marks)

CO4: Describe Couplings and Bearings. (10 Hrs, 10 marks)

CO5: Prepare a production drawing. (35 Hrs, 35 marks)

LOs FORMATION

COURSE NAME: - PRODUCTION DRAWING (502) (Total 100 Hrs., Total 100 Marks)

List of COs and LOs

\mathbf{C}	O	1:	De	escr	ibe	din	iens	ion	ing	and	dra	w I	Mult	ti v	view	pro	iec	tion	.(20	Hrs.,	20N	Iarl	ks)
_	_															P	.,		(

LO1: Describe Dimensioning (5 Hrs., 5 Marks)

LO2: Concepts of multi-view projection (15 Hrs., 15 Marks)

co2: Concept of sectional views and Draw Sectional views. (20 Hrs, 20 marks)

LO1: Concept of Sectional Views. (5 Hrs., 5 Marks)

LO2: Draw Sectional views. (15 Hrs., 15 Marks)

CO3: Concepts of Threaded Joints, Welded Joints and Riveted Joints (15 Hrs, 15 marks)

LO1: Concepts of Threaded Joints. (05 Hrs., 05 Marks)

LO2: Concepts of Welded Joints. (05 Hrs., 05 Marks)

LO3: Concepts of Riveted Joints. (05 Hrs., 05 Marks)

CO4: Describe couplings and bearings. (10 Hrs, 10 marks)

LO1: Describe Couplings. (05 Hrs., 05 Marks)

LO2: Describe Bearings. (05 Hrs., 05 Marks)

CO5: Prepare a Production Drawing. (35 Hrs, 35 Marks)

LO1: Explain detailed drawings. (5 Hrs., 5 Marks)

LO2: Draw given views of machine components and their assemblies on drawing sheets. (30 Hrs., 30 Marks)

PART B:- CURRICULUM OF PRODUCTION ENGINEERING

RGP	RGPV (Diploma Wing) E				COURS	E PLAN	Ī	ŀ	Form	nat -2	She No.	
(Course Nan	ne	Pro	duction	Drawing			Sem	Semester		r Fifth	
Braı	nch		ODUCTION SERI		Course Code	502	No. of 0	No. of COs			No. of LOs	11
Total Hrs. o Teaching I		100	Total 100 Total no. of Assessments Types of Assessment s							No. of External Assessm	ent	
		DE	SCRIPTIO	ON OF	OUTCOMES					T-L Hrs.	Max Marks	3
CO 01	P05502		escribe di iew proje	mensio ction.	ning and draw	v Multi-	-			20	20)
Los	PO5502	Describe Dimensioning.								05	05	;
	PO550212 Concepts of multi-view projection								15	15	5	
CO 02	P05502	22 C	Concept of sectional views and Draw Sectional views.							20	20)
Los PO550221		221 C	oncept of	Section	al Views.					05	05	;
	PO5502	222 D	Draw Sectional views.								15	5
CO 03	P05502		oncepts o		ded Joints, W	elded J	oints			15	15	3
Los	PO5502	231 C	oncept of	Threade	ed Joints					05	05	,
	PO5502	232 C	oncept of	Welded	Joints					05	05	,
	PO5502	233 C	oncept of	Riveted	Joints					05	05	5
CO 04	P05502	24 D	escribe co	ouplings	s and bearings	i.				10	10)
Los	PO5502	241 D	escribe co	uplings						05	05	5
	PO5502	242 D	Describe Bearings.							05	05	;
CO 05	P055025 Prepare a Production Drawing							35	35			
Los	PO5502	251	Explain detailed drawings.					05	05			
	PO5502	252	Draw given views of machine components and their assemblies on drawing sheets.							30	30	

		OIPLOMA BHOPAL		RRICULUM FOR E COURSE	FO	RMA 3	T	Sheet No.			
Branch		Pr	oduction Engineeri	ng	Semester			V			
Course C	Code	502	Course Name	Product	ion Dra	awin	9				
Course Out	tcome 1	Describe	dimensioning and di	raw Multi view project	ion		each Hrs	Marks			
Learning O	outcome 1	Describe	Describe dimensioning 1+4 05								
Contents		of I.S. dimension angles, of Projection and parti	Code 696 & 270 oning. Dimension countersunk,	d location) dimensionial location dimensionial location dimensionial location general rules for of cylinder holes, are respective and spot facing ection. First and third actorial views into orthogonal	diments of cases of c	sionii ircle, w thr roject	ng, syst narrow eads, ta ion, view	ems of space, per etc. ws - full			
Method of	Assessm	ent Paper per	n test								
Learning O	utcome 2	Concepts	of multi-view project	ction			3+12	15			
Contents		and partia		ection. First and third a torial views into orthog							
Method of	Assessm	ent Drawing	Examination								
Course Out	tcome 2	Concept	cept of sectional views and Draw Sectional views.					Marks			
Learning O	utcome 1	Concept	of Sectional Views.				1+4	05			
Contents				ctioning conventions, s als as per IS code 686		lines.	Hatchin	g			
Method of	Assessm	ent Assignme	ent								
Learning O	outcome 2	Draw S	Draw Sectional views. 3+12 15								
Contents		Draw S	Draw Sectional Views of different machine components.								
Method of	Assessm	ent Drawir	ing Examination								

Course Outcome 3	Concepts of Threaded Joints, Welded Joints and Riveted Joints	Teach Hrs	Marks
Learning Outcome 1	Concept of Threaded Joints	1+4	05
Contents	Introduction, Screw threads- definitions & Nomenclatu thread, Conventional representation of screw thread, T fasteners: Nuts, Bolts, Stud & Washers etc. procedure bolt and their assembly.	ypes of Thre	aded
Method of Assessment	Drawing Examination		
Learning Outcome 2	Concept of Welded Joints	1+4	05
Contents	Introduction, Types of Welded joints, representation or production drawing, Welded joints symbols.	f weld by sy	mbol on
Method of Assessment	Drawing Examination		
Learning Outcome 3	Concept of Riveted Joints	1+4	05
Content	Rivets & method of riveting, Caulking & fullering, Rivets symbols, Types of Riveted joints, Definitions with rivet joints		
Method of Assessment	Assignment		
Course Outcome 4	Describe couplings and bearings.	Teach Hrs	Marks
Learning Outcome 1	Describe couplings.	3+2	05
Contents	Introduction, Classification of coupling, Flange coupling & Protected, Flexible Coupling, Universal coupling.	ng Unprotec	ted
Method of Assessment	Paper pen test.		
Learning Outcome 2	Describe Bearings.	3+2	05
Contents	Introduction, types of bearings: rolling contact, sliding bearing, bush bearing, Plummer block	contact, jou	rnal
Method of Assessment	Assignment		

Course Outcome 5	Prepare a Production Drawing		each Hrs	Marks			
Learning Outcome 1	Explain detailed drawings.	1-	+4	05			
Contents	Detailed drawing, assembly drawing, scale, tolerance of forms and positions, notes etc. Title block, tool list, gauge list.						
Method of Assessment	Paper pen Test						
Learning Outcome 2	Draw given views of machine components and their assemblies on drawing sheets.		9+21	30			
Contents	Preparation of assembly drawing from detailed drawing. Exploded views, sectional pictorial views, Plummer block, lathe tool post, flange coupling, universal coupling, cotter joint and knuckle joint.						
Method of Assessment	Drawing Examination						

CO1:LO1

RGPV (Diploma Wing) Bhopal		Branch Code P05	Course Code 502	CO Code <mark>01</mark>	LO Code <mark>01</mark>	Format No. 4			
COURSE NAME	PRODUCTION DRAWING								
CO Description	Describe dimensioning and draw M	Iulti view proj	ection.						
LO Description Describe dimensioning.									
SCHEME OF STUDY									

S. No	Learning Content	Teaching/ Learning Method	Description of T-L Process	Teach Hrs.	Pract. /Tut Hrs.	LRs Required	Re mar ks
1	Types of dimensions (size and location) dimensioning terms and notations. (use of I.S. Code 696 & 2709) general rules for dimensioning, systems of dimensioning. Dimension of cylinder holes, arcs of circle, narrow space, angles, countersunk, Counter bore and spot facing, screw threads, taper etc. Projection: orthographic projection. First and third angle projection, views -full and partial, conversion of pictorial views into orthographic views, conventional representation as per IS: 696.	al Lecture method, demonstra tion, quiz.	Teacher will explain the contents. Teacher will conduct practice session to make students practice their knowledge.	01	04	Hando ut, Book, PPT, charts.	

SCHEME OF ASSESSMENT

S. No	Method of Assessmen t	Description of Assessment	Maxim um Marks	Resources Required	External / Internal
1	Paper pen test	For the given learning content, Students write answer of questions and face Practical Viva	05	Progressive test/ End semester exam/ Drawing sheet	Internal /External

ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)

CO1:LO2

	RGPV (Diplom Wing) Bhopal		HEME FOR EARNING	Branch Code	Code		CO ode	LO	_	rmat
	wing) Bhopa		OUTCOME	P05	502	-		Code 02	IN	o. 4
СО	URSE NAME	PRODUC	TION DRAW	ING	•	•	•			
СО	Description	Describe din	nensioning and d	raw Multi vie	w projecti	on.				
LO	Description	Concepts of	multi-view proje	ection						
			SCHE	ME OF STUD	ΟY					
S. N o.	Learning Method			Description L Pro-		Teac h Hrs.	Pract. LRs /Tut Requ Hrs.		ired	Rem
1	Projection: orthographic projection. First and third angle projection, views - full and partial, conversion of pictorial views into orthographic views, conventional representation as per IS: 696. Traditional Lecture method + Demonstrati on session to Students per their known in the conduct properties on the conduct properties o				content. Il ctice nake actice	03	12	Hande Book, PPT, Video lectur	,)	
,			SCHEME	OF ASSESSI	MENT		•			
S. No	Method of Assessment		cription of Asses	ssment	Maximu m Marks		Resources Required		/	kternal nternal
1	Drawing Examination	concepts	will be asked to of projection or representation.	ons and	15	Č				rnal ternal
	Al	DDITIONAL	INSTRUCTION	S FOR THE I	HOD/ FA	CULTY	(IF A	NY)	•	

$\overline{}$	_	т	\sim	4
	2:		L)	ı

CO2:	LO1										
]	RGPV (Diploma Wing) Bhopal	a	SCHEME FOR LEARNING OUTCOME	Bran Cod P05		e Coo de 02		le	Format No. 4		
	URSE ME	PRODU	JCTION DRAV	WING	•	•					
СО	Description	Concept	of sectional views	and Draw S	ectional vi	ews.					
LO	Description	Concept	of Sectional Views	S.							
			SCH	EME OF ST	UDY						
S. N o.	Learning (Content	Teaching— Learning Method	Descript Pro	Teac h Hrs.	Pract./ Tut Hrs.	LRs Required	Re i mar ks			
1	Types of Views, conventions, lines. Hatchin for different per IS code 68	materials a	Lecture method + Assignment	the co	will expla ontent Teacher wi Progressiv	to ill	04	Hand out, Book			
			SCHEME	E OF ASSES	SSMENT	•					
S. No	S. Method of No Assessment Description of Assessment			sment	Maximu m Marks		ources uired		External / Internal		
1	Assignment	For the given learning contons Students write answer questions.			05	paper seme exam	Progressive Test paper/ End semester exam/Drawing sheet				
	ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)										

CO2:	LO ₂											
	RGPV (Diplon Wing) Bhopa		SCHEME FOR LEARNING OUTCOME		Bran ch Cod P05	e	Course Code 502	CO Code 02	LO Code <mark>02</mark>		Format No. 4	
СО	URSE NAME	PRODU	JCTION DRA	AWING		•						
СО	Description	Concept	of sectional view	ws and Drav	w Secti	ional	views.					
LO	Description	Draw Sec	ctional views.									
	SCHEME OF STUDY											
S. N o.	Learning C	ontent	Teaching– Learning Method		cription of Process		Teac h Hrs.	Pract./ Tut Hrs.	LRs Requ	ired	Rem arks	
1		Views of different machine Lecture the content method + students. To				to cher duct	03	12	Hando , Boo PPT, Video lecture	k,		
			SCHE	ME OF ASS	SESSN	IENT						
S. No	Method of Assessment	Description of A	Description of Assessment			ximu m arks	Resour Requir			xternal / nternal		
1	Drawing Examination	given s	ent will be asked to draw an asectional view with front/tope of a given part.				15	Progres Test End semeste exam/D sheet	paper/	Exte	ernal	
	AD	DITIONA	L INSTRUCTI	ONS FOR	THE H	IOD/	FACUL	TY (IF A	NY)			

CO3:LO1

<u>CO3:</u>	CO3:LO1											
I	RGPV (Diploma Wing) Bhopal	DME Brancl Code	:	Course Code 501	CO Code 03	LC Code 01		Format No. 4				
CO	URSE NAME	PRODUC	TION DRA	WING				1	•			
СО	Description	Concepts of	f Threaded Join	nts, Welded Joi	nts and	Riveted	Joints					
LO	Description	Concept of	Threaded Join	ıts								
	SCHEME OF STUDY											
S. Learning Content Teaching— Learning L Pro O. Method						1	eac Prace n t rs. Tu	/ Re	LRs equired	Remar ks		
1	Introduction, threads- del Nomenclatur screw Conventional representation thread, Threaded Nuts, Bolts Washers etc of drawing in their assemble	e, Forms of thread, n of screw types of fasteners: , Stud & procedure ut, bolt and	Traditional Lecture method + assignment	students. Tea will conduct	explain the			ut,	nndo ook			
			SCHEM	ME OF ASSESS	SMENT	Γ	•	•		•		
S. No	Method of Assessment	sessment		arks	Resour Requir			External / Internal				
1 Drawing Examination For the given learning content, Students write answer of questions. 5 Progressive Test paper/ End semester exam/Drawing sheet												
	A	DDITIONAL	LINSTRUCTIO	ONS FOR THE	HOD/	FACUI	LTY (IF A	ANY)				

CO3:LO2

CO3	LO2												
	RGPV (Diplon Wing) Bhopa		LEA	SCHEME FO ARNING OUT		Branch Code P05	Co	irse de 02	CO Cod 03		LO Code 02		Format No. 4
CO	URSE NAME	PRO	ODU	CTION DRA	WING								
СО	Description	Con	cepts	of Threaded Jo	ints, Wel	ded Joints	and Riv	eted	Joints				
LO	Description	Conc	cept of	f Welded Joints	S								
	SCHEME OF STUDY												
S. Learning Content Teaching— Description N Learning Method N Proces							h		rs.	Pract Ll ./ Re Tut Hrs.		s uire d	Rem arks
1 Introduction, Types of Welded joints, representation of weld by symbol on production drawing, Welded joints symbols.				Traditional Lecture method + Assignme nt	the contents to ou					Han out, Boo			
				SCHE	ME OF A	ASSESSM	ENT		l				
S. No	Method of Assessmen		Ι	Description of A	Assessme	ent	Maxin Marl			sources quired			ternal /
							Inter /Ext	rnal ernal					
	A	DDIT	IONA	L INSTRUCT	IONS FO	OR THE H	OD/ FA	CUL	TY (II	F ANY)		

CO3:LO3

CO3:	LO3												
	RGPV (Diplo Wing) Bhop		SCHEME FOR Branch LEARNING OUTCOME Code P05			Cou Coo 50	de	CO Code 03	LO Code <mark>03</mark>		Format No. 4		
СО	URSE NAME	PRO	DUCTION DI	RAWING		<u>'</u>		<u>, </u>					
СО	Description	Conce	epts of Threaded	Joints, Welde	d Joints a	nd Rive	eted Jo	oints					
LO	Description	Conce	pt of Riveted Joi	ints									
SCHEME OF STUDY													
S. N o.	Learning C	Content	Teachin g- Learni ng Metho d		on of T-L cess		Teac h Hrs.	h ./		./ Requ		s uired	Rem arks
1	rivet heads	lking & pes o o, Rivet o o joints of term	f Lecture s method of + s, Assign s ment	Teacher w the contents Teacher wi Progressive	ain nts. uct	01	04	Handut, Book					
			SCI	HEME OF AS	SESSME	NT			<u> </u>		l		
S. No	Method of Assessment		Description	of Assessment	;	Maxii m Marks		Resour Requir			xternal / nternal		
1	Assignment		the given learning answer of que		ıdents	5		Progres Test pap End sen exam/D g sheet	per/ nester	Inte /Ext	rnal ernal		
	A	DDITIC	ONAL INSTRUC	CTIONS FOR	THE HO	D/ FAC	CULTY	Y (IF A	NY)	-			

CO4:LO1

` *	04:L	<u>O1</u>					ı			1			
CO Description Describe couplings and bearings. Column				LE	LEARNING OUTCOME Cod			C	ode	Code	Code		Format No. 4
S. Learning Content Classification of Coupling, Flange coupling Unprotected & Protected, Flexible Coupling, Universal coupling. S. Method of Assessment S. Method of Assessment Description of T-L Process Character will explain the coupling Universal coupling. S. Method of ST-L Process Character will explain the contents to students. S. Method of Assessment S. Method of ST-L Process Character will explain the contents to students. S. Method of Assessment S. Method of Assessment Description of Assessment Maximum Resour ces Requir ed 1 Paper pen test For the given learning content, Students write answer of questions. S. Description of Assessment S. Description of Assessment S. Description of Assessment Maximum Resour ces Requir ed Internal file/End semester exam/Drawing sheet	CO	URSE NAME	PROI	DUC	TION DRAW	'ING						•	
S. Learning Content	СО	Description	Descri	ibe co	ouplings and bear	rings.							
S. Learning Content No. Learning Content No. Learning Content No. Learning Content Learning Method No. Learning Content No. Learning Method No. Learning Content No. Learning Content No. Learning Method No. Learning Method No. Learning Method No. Learning Content No. No. No. Learning Content No. No. Assessment No. No. Learning Content No. No. No. Learning Content No. No. No. No. Learning Content No. No. No. No. No. Learning Content No.	LO	Description	Descri	ibe co	ouplings.								
No. Learning Method Process Character Tut Hrs. Required Method Method Process Character Tut Hrs. Required Method Method Method Method Process Method Process Method Method Process Method Method Process Method Process Method Process Method Process Method Process Process Practical Paper pen For the given learning content, Students write answer of questions. Students write answer of questions. Students write answer of questions Practical Internal Process Practical Pract					SCHI	EME OF	STUD	Y					
Classification of coupling, Flange coupling Unprotected & Protected, Flexible Coupling, Universal coupling. SCHEME OF ASSESSMENT S. Method of Assessment Maximum Marks Resour ces Required a For the given learning content, test For the given learning content, Students write answer of questions. S. Paper pen test For the given learning content, Students write answer of questions. S. Practical file/End semester exam/Drawing sheet Internal /External /Ex	N				Learning	of	c	h		_			
S. Method of Assessment No Assessment Description of Assessment No Assessment Students write answer of questions. Maximum Ces Requir ces Requir ed Description of Assessment Maximum Marks For the given learning content, Students write answer of questions. Students write answer of questions.	1	Classification coupling, Fla coupling Unp Protected, Fla Coupling, Un	n of inge protected exible	d &	Lecture	explair conten	0	3	02				
No Assessment	•				SCHEMI	E OF AS	SESSM	ENT	•		•		•
test Students write answer of questions. Students write answer of questions. file/End semester exam/Drawing sheet				Des	scription of Asse	essment				ces Re			
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)	test Students write answer of questions. file/End semester exam/Drawing												
		A	DDITIC	NAL	. INSTRUCTIO	NS FOR	ТНЕ Н	OD/ FA	CUL	TY (IF A	NY)		

$CO4 \cdot I \cdot O2$

CO4:	LO2												
	RGPV (Diplor Wing) Bhopa		SCHEME FOR LEARNING OUTCOME ch Cod P05			le	Course Code 502	CO Code 04	LO Code <mark>02</mark>		Format No. 4		
СО	URSE NAME	PROI	DUCTION DRA	AWING									
СО	Description	Descri	ibe couplings and	bearings.									
LO	Description	Descri	ibe Bearings										
	SCHEME OF STUDY												
S. N o.	Learning C	Content	Teaching– Learning Method	Descript T-L Pr	,	Tea ch Hrs	Pract./ Tut Hrs.	l		Remar ks			
1	Introduction, of bearings: contact, slidi contact, jour bearing, bush bearing, plun block.	rolling ng nal	Traditional Lecture method	Teacher explain contents students.	explain the contents to		03	02	Handou , Book				
			SCHE	EME OF AS	SESSI	MEN	ΙΤ						
S. No	Method of Assessment		Description of A	Assessment			aximum Marks	Resou Requi			External / Internal		
1	Assignment	5	Progres Test End semest exam/I sheet	paper/		ernal kternal							
	A	DDITIC	ONAL INSTRUCT	TIONS FOR	THE I	HOD)/ FACU	LTY (IF A	NY)				

		5	. Т	-	\cap	1
•	u	Э.	: 1	и	₩.	ш

CO ₅	:LO1										
	RGPV (Diplo Wing) Bhop			SCHEME FOR ARNING OUTCOME ch C e P05			irse de 12	CO Code <mark>05</mark>	LO Code <mark>01</mark>		Format No. 4
CC	OURSE NAME	PRODU	CTION DRAW	VING							
CC	Description	Prepare a	Production Drawi	ing							
LO	Description	Explain d	etailed drawings.								
			SCH	EME OF S	STUDY						
S. N o.	Learning	Teaching - Learnin g Method	Description of T-L Process			Te ch H	ı ct./	Requi	red	Remar ks	
1	Detailed drawing, scale, forms and poetc. Title blogauge list.	of l Lecture es method +	Teacher the cont will con session students their kn Drawing	ent. Teaduct prate to make practic owledg	acher actice	01	04	Hando ut, Book, PPT, charts video film			
	1		SCHEM	E OF ASS	ESSME	ENT	Į.		•		
S. No			Description of Ass	sessment		Maxim m Mark		Resou Requi	ources quired		External / Internal
Paper pen test Student will be asked to of a given production dra					etails	5		Drawin sheet/A ment/ semest exam/I sheet	Assign End	Int	ternal
	A	DDITIONA	L INSTRUCTIO	NS FOR T	ГНЕ НС	DD/ FA	CUL	TY (IF A	NY)		

	CO5: LO2												
	RGPV (Diplon Wing) Bhopa			SCHEME FOR Bran RNING OUTCOME Coo			Course Code 502		CO Code <mark>05</mark>	LO Code 02		Format No. 4	
CO	URSE NAME	PROI	DUCTIO	ON DRAWIN	G			•			•		
СО	Description	Prepar	e a Produ	action Drawing									
LO	Description	Draw §	given vie	ews of machine components and their assemblies on drawing sheets.									
	SCHEME OF STUDY												
S. N o.	Learning	g Conter	nt	Teaching— Learning Method	Description of T-L Process			Teac h Hrs.	Pract./ Tut Hrs.	LRs Requi	red	Remar ks	
1	Preparation of assembly drawing from detailed drawing. Exploded views, sectional pictorial views, Plummer block, lathe tool post, flange coupling, universal coupling, cotter joint and knuckle joint.			Traditional Lecture method, demonstrat ion, assignment	will practice to make practice knowle	lain the tent. Teacher conduct ctice session nake students		09	21	Handout, Book, PPT, Video			
				SCHEME	OF ASS	ESSM	IENT			•			
S. No	Method of Assessment		Descrip	otion of Assessm	nent		aximum Marks		esources equired			External Internal	
1 Drawing Examination For the given learning co Students write answer of question face Practical Viva							30	pap sen	gressive er/ End nester m/Drawi et	Test		ternal External	
	I	ADDIT	TIONAL	INSTRUCTION	IS FOR T	HE H	OD/ FA	CULTY	(IF AN	Y)			

Reference Books:

- 1 Machine drawing by N.D. Bhatt
- 2 Machine drawing by R.K. Dhawan
- 3 Machine drawing by V. Lakshminarayanan & M.L. Mathur 4 Machine drawing by P.S. Gill