#### RAJIV GANDHI PROUDYOGIKI VISHVAVIDYALAYA (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 life long 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 principle and application Computer Aided Technology. (504)

- 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 NIL
- 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

NIL

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

## FRAMED COs FOR SELECTED TERMINAL BEHAVIORS

- To apply knowledge of mathematics, science, and engineering.
   TB-1 To understand principle and application of Computer Aided Designing. (504)
   C03: Describe the importance of computer aided Engineering. (504)
- 2. To design and conduct experiments, as well as to analyze and interpretdata. NIL
- 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 NIL
- 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 NIL
- 10. To use the techniques, skills, and modern engineering tools necessary for engineering practice. NIL

# CO GROUPING AND COURSE FORMATION COURSE NAME: - COMPUTER AIDED TECHNOLOGIES(504)

(Total 100 Hrs., Total 100 Marks)

# LIST OF COs: -

CO1: Understand Computer Aided Drafting(20 Hrs., 20 marks)

CO2: Understand Computer Aided Design. (20 Hrs., 20 marks)

CO3: Understand Computer Aided Engineering (20 Hrs, 20 marks)

C04: Understand Group Technology & Computer Aided Process Planning. (20 Hrs., 20 marks)

C05: Understand use of computers for managing Quality & Resource Management(20 Hrs., 20 marks)

## LOs FORMATION

## **COURSE NAME: -COMPUTER AIDED TECHNOLOGIES (504)**

## (Total 100 Hrs., Total 100 Marks)

List of COs and Los

- CO1: Understand Computer Aided Drafting (20 Hrs, 20 marks)
  - LO1: To know the concept of Computer Aided Drafting hardware(10 Hrs., 10 Marks) LO2: To know the concept of Computer Aided Drafting software. (10 Hrs., 10 Marks)

CO2: Understand Computer Aided Design. (20 Hrs, 20 marks)LO1: To know concepts of Design. (10 Hrs., 10 Marks)LO2: To familiarize with Designing Software Tools(10 Hrs., 10 Marks)

CO3: Understand Computer Aided Engineering (20 Hrs, 20 marks)LO1: To know basics of CAE & CAA(10 Hrs., 10 Marks)LO2: To know about Different Software Tools for CAE (10 Hrs., 10 Marks)

- CO4: Understand Group Technology & Computer Aided Process Planning (20 Hrs, 20 marks)LO1: Introduction to Group Technology (10 Hrs., 10 Marks)LO2: Understand Computer Aided Process Planning (10 Hrs., 10 Marks)
- CO5: Understand use of computers for managing Quality & Resource Management(20 Hrs, 20 marks)LO1: To Know about quality management tools. (10 Hrs., 10 Marks)LO2:To Know about Resource Management tools. (10 Hrs., 10 Marks)

# PART B: - CURRICULUM OF PRODUCTION ENGINEERING

RGP	V (Diplo	ma W	Ving) Bhopal		COURSE	E PLAN	1	Form	<mark>at -2</mark>	She	eet N	Jo.1/1
Co	ourse Nam	ne	COMPUTE	R AII	DED TECH	NOL	OGIES	S Se	mester		FIF	ТН
Bran	ch		ODUCTION GINEERING	(	Course Code	504	No. o	f CO's	05	No. o LO's		10
Tea	l Hrs. of aching arning	100	Total Marks	100	Total no. of Assessments			bes of sments		Exte Asse		
			DESCR	IPTIO	N OFOUTCO	OMES					Г-L Irs.	Max. Marks
CO 01	P05504	-1	Understand Co	omput	er Aided Dra	fting					20	20
Los	P05504	11	To know the co	oncept	of <b>Computer</b>	Aided	Draftin	ig hardv	vare		10	10
LUS	P05504	-12	To know the co	oncept	of Computer	Aided	Draftin	ig softwa	are		10	10
CO 02	P05504	-2	Understand C	omput	ter Aided Des	ign.					20	20
Loc	P05504	-21	To know cond	epts o	f Design						10	10
Los	P05504	-22	To familiarize	with	Designing So	ftware	Tools				10	10
CO 03	P05504	-3	Understand	Comp	uter Aided E	nginee	ring				20	20
	P05504	-31	To know basi	cs of C	CAE & CAA						10	10
Los	P05504	-32	To know abou	ıt Diff	erent Softwar	e Tools	s for CA	ΑE			10	10
CO 04	P05504	4	Understand Gr Planning	oup To	echnology &	Compu	ter Aid	ed Proc	ess		20	20
Loc	P05504	41	Introduction t	o Groi	p Technolog	У					10	10
Los	P05504	42	Understand C				anning				10	10
CO 05	P05504	.5	Understand u Management	se of c	omputers for	manag	ging Qu	ality &	Resourc	e	20	20
Los	P05504	-51	To Know abo	ut qua	lity managem	ent too	ls.				10	10
	P05504	-52	To Know abo	o Know about Resource Management tools							10	10

· ·	PLOMA WING) HOPAL	OCB CURRICULU	M FOR THE COURSE	FORM	IAT- 3	Sheet No. 1/2
Branch	PRODUCTION	ENGINEERING	Semester		FIF	TH
Course Code	504	Course Name	<b>COMPUTER AIDED</b>	TECHN	OLOGII	ES
Course Outcome 1	Understand Con	nputer Aided Drafting	Ş		Teach Hrs	Marks
Learning Outcome 1	To know the con	cept of Computer Aid	ed Drafting hardware		10	10
CONTENT Method of	configuration for	CAD application. Bas D Modeling and anim	r graphics for visualizing sic concepts of Computer ation, List of popular Com test/ Laboratory assessm	Aided of mputer A	drafting s	oftware's,
Assessment Learning Outcome 2	To know the con	cept of Computer Aid	ed Drafting software		10	10
CONTENT	-	f popular Computer A	fting software, Introduct ided drafting tools. Basic			0
Method of Assessment		Paper per	n test/ Laboratory assessm	nent		
Course Outcome 2	Understand Con	nputer Aided Design.			Teach Hrs	Marks
Learning Outcome 1	To know concep	ts of Design			10	10
CONTENT	Steps of Design,	Design outcomes,				
Method of Assessment			Paper pen test			
Learning Outcome 2	To familiarize w	ith Designing Softwar	re Tools		10	10
CONTENT	modeling, constra	aints, and Design stand	gn software, List of popul dards. Advantages of Ma AD, Disadvantages of C	nual Des	,	
Method of Assessment		Paper per	n test/Laboratory assessm	nent		
Course Outcome 3	Understand Co	omputer Aided Engir	neering		Teach Hrs	Marks
Learning Outcome 1	To know basics	of CAE & CAA			10	10
CONTENT	Concept, Applica	tion, Scope, Role of C	Computer Aided Analysis	s (CAA)	in CAE	
Method of Assessment		Paper per	n test/Laboratory assessm	nent		

	PLOMA WING) HOPAL	OCB CURRICULUN	M FOR THE COURSE	FORM	AT-3	Sheet No. 2/2					
Branch	PRODUCTION	ENGINEERING	Semester		FIF	ГН					
Course Code	504	Course Name	COMPUTER AIDED	TECHN	OLOGI	ES					
Learning Outcome 2	To know about	Different Software Too	ols for CAE		10	10					
CONTENT	Different Softwa	re Tools for CAE avail	lable in market.			II					
	Different Tool	s popular in different ir	ndustry sectors.								
Method of Assessment		Paper pen	test/Laboratory assessm	nent							
Course Outcome 4	Understand Gr	oup Technology & Co	mputer Aided Process P	lanning	Teach Hrs	Marks					
Learning Outcome 1	Introduction to	Group Technology			10	10					
CONTENT	Introduction, pa system structur technology. Co M/c cells,	ire system	m Benef	0							
Methodof Assessment											
Learning Outcome 2	Understand Con	nputer Aided Process P	lanning		10	10					
CONTENT		1 1 0	e sheet, Need of CAPP, APP system, Benefits of	• 1		System e.g.:					
Methodof Assessment			Paper pen test/								
Course Outcome 5	Understand use Management	e of computers for man	aging Quality & Resour	ce	Teach Hrs	Marks					
Learning Outcome 1	To Know about	quality management to	pols.		10	10					
CONTENT	Concept of CA	AI, CAQA &CAQC, C	Concept, Scope, Applicat	ion, Too	ls used.						
Method of Assessment			Paper pen test								
Learning Outcome 2	To Know about	To Know about Resource Management tools1010									
CONTENT	Concept of MRP, MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.										
Method of Assessment			Paper pen test								

RGI	PV (Diploma V Bhopal	Wing)	SCH	EME FOR L OUTCO		Branch Code P05	Cours Code 504	e C	CO ode <mark>01</mark>	L Co 0	de	FormatNo .4
COU	RSE NAME	COM	PUTE	R AIDED TI	ECHNOLOG	IES						
CO D	escription	Under	stand	Computer A	ided Drafting							
LO D	escription			1	Computer Aic		ng hardw	vare				
				•	SCHEME O		U					
S. No.	Learning C	Conten	t	Teaching– Learning Method	Description Proce		-L Teach Pract. Hrs. /Tut Hrs			LRs Required		Remarks
of computer graphics for				Traditional Lecture method	Teacher will the contents will conduct Progressive Assignment	. Teacher test/ give			-	Boo	k	
				SC	HEME OFAS	SSESSM	ENT					
S. No	Method of Assessment		D	escription of	Assessment	Ν	Maximur Marks		Resour Require			rnal / rnal
1	Paper pen ter Practical assessment			iven learning wer of quest		udents	10	te se	ogress st/End mester am		Interna /Exter	
	A	DDIT	IONA	L INSTRU	CTIONS FO	R THE H	OD/ FA	CULT	Y (IF	ANY	()	
		station		iguration Put Devices								

R	GPV (Diploma. Bhop		SCHEM LEAR	NINGOUTCO	Branch Code	Cours Code	e Code		Code	Format No.4
				ME	P05	504	01		<mark>02</mark>	
	URSE NAME	COMPU	UTER AIDED	TECHNOLOG	IES					
CO	Description	Underst	tand Computer	Aided Draftin	g					
LO	Description	To know	v the concept of	<b>Computer Aid</b>	ed Draft	ing soft	ware			
				SCHEME OF	STUDY					
S. No.	Learning C	Content	Teaching– Learning Method	Description Proces		Teach Hrs.	Pract. /Tut Hrs.	LRs Required		Remarks
1	Basic concepts of Computer Aided drafting software, Introduction of 3D Modeling and animation, List of popular Computer Aided drafting tools. Basic commands of AutoCAD software – Draw Modify, Dimensions etc.		of method + Practical lar of	Teacher will e the content. T will conduct Progressive te so that studen explain 3D m	eacher est/quiz	08	02	Boo	dout, k, ıputer	
			SC	HEME OFAS	SESSME	NT				
S. N	No Method of Assessment		Description of	f Assessment		aximun Marks	n Resour Requir		Extern Inter	
1	Paper pen tes Practical assessment	write	-	given learning content, Students nswer of questions and face al Viva			10 Progress test/ 1 semeste exam/ Practica file			al
	A	DDITIO	NAL INSTRU	CTIONS FOR	THE HC	D/FAC	CULTY (IF	ANY	<i>(</i> )	
List	of Practical									
	• Auto CAD C									
	• 3 D Modelin	0								
(	• Various 3 D	Modelin	ng Software							

RC	GPV (Diplo		'ing)	SCHEME FOR	R LEARNING	Branch Code	Course		LC Cod		atNo
	Bhop	al		0010	UME	P05	504	02	01		
COI	JRSE NAM	ME C	COMP	UTER AIDED	TECHNOLOG	IES	1	I		I	
CO	Description	<sup>n</sup> U	U <b>nders</b>	tand Computer	· Aided Design.						
LO ]	Descriptior	ı l	Fo kno	w concepts of I	Design.						
		L. L			SCHEME OF S	STUDY					
S. No.	Learn	ing Co	ontent	Teaching– Learning Method	Description Proces		Teach Hrs.	Pract./ Tut Hrs.	LRs Requ red		:ks
1	Steps of E outcomes	•	, Desig	n Traditional Lecture method + Assignment	Teacher will e the content students. Teac conduct Progr test/give ass so that studen know about d process	to cher will ressive ignment ts will	10	-	Book		
				SC	HEME OFASS	ESSME	NT			I	
S. N	lo Metho Assess			Description o	f Assessment		laximum Marks	n Resour Requir		External / Internal	
1	Paper p	en test		he given learnin answer of ques	ng content, Stuc stions.	lents	10	Progress Test pay End semeste exam	per/ /	Internal External	

RC	PV (Diploma V Bhopal	Ving) SCH	EME FOR I OUTCO		Branch Code P05	Cours Code 504			O ode	Format No.4
COU	URSE NAME	COMPUT	ER AIDED 7	<b>FECHNOLO</b>	GIES		ł			1
COI	Description	Understan	d Computer	Aided Design	•					
LO I	Description		•	signing Softw						
				SCHEME OF						
S. No.	Learning C	ontent	Teaching– Learning Method	Description Proce		Teach Hrs.	141115.		s quired	Remarks
1	<ul> <li>Difference between</li> <li>Drafting and Design</li> <li>software, List of popular</li> <li>CAD tools, Parametric</li> <li>modeling, constraints,</li> <li>and Design standards.</li> <li>Advantages of Manual</li> <li>Designing,</li> <li>Disadvantages of</li> <li>Manual Designing,</li> <li>Advantages of CAD,</li> <li>Disadvantages of CAD.</li> </ul>		Traditional Lecture method + Assignment	Teacher will the content students. Tea conduct Prog test/give as so that studen know about Designing So Tools	t to acher will gressive signment nts will	10	-	Boo	ьk	
	<u> </u>		SCH	IEME OFASS	SESSME	NT				I
S. N	o Method of Assessment		escription of	Assessment		laximun Marks	n Resou Requi		Exter Inte	
1	Paper pen tes Practical assessment	-	given learnin swer of quest	g content, Stu tions.	dents	10	Progress Test pa End semeste exam	per/	Interna /Extern	
	AD	DITIONA	L INSTRUC	TIONS FOR	THE HO	D/ FAC	ULTY (IF	ANY	<b>(</b> )	
	List of	Practical								
	•	-	CAD Tools d CAD Desig	gn						

## CO3:LO1

No.       Learning Method       Process Method       Hrs.       Tut Hrs.       Required         Concept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAE       Traditional Lecture method + assignment       Teacher will explain the contents and provide handout to students. Teacher will conduct Progressive test/assignment so that students know about CAE & CAA       10       -       Handout, Book       Handout, Book         SCHEME OFASSESSMENT         Schement of Assessment         Method of Assessment       Description of Assessment       Maximum Marks       Resources Required       External / Internal	005.	LOI									
CO Description       Understand Computer Aided Engineering         CO Description       To know basics of CAE & CAA         SCHEME OF STUDY         S.       Learning Content       Teaching— Learning Method       Description of T-L Process       Pract./ Hrs.       LRs Required       Remarks         Concept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAE       Traditional Lecture method + assignment       Teacher will explain the contents and provide handout to students. Teacher will conduct Progressive test/assignment so that students know about CAE & CAA       10       -       Handout, Book       Image: Society of Society	R	· •	0,			Code	Code	Code		ode	
Onderstand computer Added Engineering         O Description       To know basics of CAE & CAA         SCHEME OF STUDY         S.       Learning Content       Teaching- Learning Method       Description of T-L Process       Teach Hrs.       Pract./ Tut Hrs.       LRs Required       Remarks         Concept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAE       Traditional Lecture method + assignment       Teacher will explain the contents and provide handout to students. Teacher will conduct Progressive test/assignment so that students know about CAE & CAA       10       -       Handout, Book         SCHEME OF ASSESSMENT         SCHEME OF ASSESSMENT         S. No       Method of Assessment       Description of Assessment write answer of questions.       Maximum Marks       Resources Required       External / Internal         Paper pen test       For the given learning content, Students write answer of questions.       10       Progressive test/assignment assessment       Internal	COU	URSE NAME	COMPU	TER AIDED 7	rechnolog	IES		1			
SCHEME OF STUDY         S.       Learning Content No.       Teaching- Learning Method       Description of T-L Process       Teach Hrs.       Pract./ Tut Hrs.       LRs Required       Remarks         Concept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAE       Traditional Lecture method + assignment       Teacher will explain the contents and provide handout to students. Teacher will conduct Progressive test/assignment       10       -       Handout, Book       Book         SCHEME OFASSESSMENT         SCHEME OFASSESSSENT         SCHEME OFASSESSENT         Set For the given learning content, Students write answer of questions.       Maximum Marks       Resources Required       External Internal         Paper pen test       For the given learning content, Students write answer of questions.       Progressive Learning       Progressive Test paper/ End semester exam	COI	Description	Understa	and Compute	r Aided Engin	eering					
S. No.       Learning Content       Teaching-Learning Method       Description of T-L Process       Teach Hrs.       Pract./ Tut Hrs.       LRs Required       Remarks Remarks Remarks Remarks Required         Vo.       Concept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAE       Traditional Lecture method + assignment       Teacher will explain the contents and provide handout to students. Teacher will conduct Progressive test/assignment so that students know about CAE & CAA       10       -       Handout, Book         SCHEME OFASSESSMENT         Scheme of Assessment       Maximum Marks       Resources Required       External / Internal         S. No       Method of Assessment       Description of Assessment       Maximum Marks       Resources Required       External / Internal         Paper pen test       For the given learning content, Students       10       Progressive Test paper/End semester exam       Internal         Paper pen test       For the given learning content, Students       10       Progressive Test paper/End semester exam       External / External	LOI	Description	To know	basics of CAE	E & CAA						
No.Learning MethodProcessHrs.Tut Hrs.RequiredConcept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAETraditional Lecture method + assignmentTeacher will explain the contents and provide handout to students. Teacher will conduct Progressive test/assignment so that students know about CAE & CAA10-Handout, BookSCHEME OFASSESSMENTSCHEME OFASSESSMENTSCHEME OFASSESSMENTS. NoMethod of AssessmentDescription of Assessment write answer of questions.Maximum MarksResources RequiredExternal / InternalPaper pen testFor the given learning content, Students write answer of questions.10Progressive rest paper/ End semester examProgressive rest paper/ End semester exam		I			SCHEME OF	STUDY					
Concept, Application, Scope, Role of Computer Aided Analysis (CAA) in CAE       Lecture method + assignment assignment assignment so that students. Teacher will conduct Progressive test/assignment so that students know about CAE & CAA       Book         Scope, Role of Computer Aided Analysis (CAA) in CAE       Description of Assessment assignment so that students know about CAE & CAA       Book         Scope, Role of Computer Aided Analysis (CAA) in CAE       Description of Assessment about CAE & CAA       Book       External / Internal         Scope, Role of Computer Aided Analysis (CAA) in CAE       Description of Assessment about CAE & CAA       Maximum Marks       Resources External / Internal         Scope, Role of Computer Aided Analysis (CAA)       Description of Assessment       Maximum Marks       Resources Required       External / Internal         Scope, Role of CASSES       For the given learning content, Students write answer of questions.       10       Progressive Required       Internal	S. No.	Learning	g Content	Learning	-						Remarks
S. NoMethod of AssessmentDescription of AssessmentMaximum MarksResources RequiredExternal / InternalPaper pen testFor the given learning content, Students write answer of questions.10Progressive Test paper/ End semester examInternal	1	Scope, R Computer	ole o Aide	d Lecture method +	the contents provide hand students. Teac conduct Progr test/assignment that students k	and dout to ther will ressive nt so know	10	-		,	
AssessmentMarksRequiredInternalPaper pen testFor the given learning content, Students write answer of questions.10Progressive Test paper/ End semester examInternal	1			SC	HEME OFASS	SESSMEN	ΝT		1		-
write answer of questions. Test paper/ /External End semester exam	S. N			Description of	Assessment						
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)	1	Paper pen tes				lents	10	Test paj End semeste	per/		
		A	DDITION	JAL INSTRU	CTIONS FOR	THE HO	D/ FACU	ULTY (IF A	ANY)	)	

R	GPV (Diploma Bhor	$\mathcal{O}$	SCHEME FOR OI	R LEARNING UTCOME	Branch Code P05		e Code	I Co 0		Format No.4
COU	JRSE NAME	COMP	UTER AIDED '	TECHNOLOG	HES	I	I			
CO	Description	Unders	stand Compute	r Aided Engir	neering					
LO	Description	To know	w about Differe	nt Software To	ols for C	CAE				
				SCHEME OF	STUDY	7				
S. No.	Learning C	Content	Teaching– Learning Method	Description Proces		Teach Hrs.	Pract./ Tut Hrs.	LRs Requ	ired	Remarks
1	Different Softw for CAE availal market. Different Tools in different ind sectors.	ble in s popula	Lecture method +	Lecture the contents method + students. Teacher			-	Hando Book	out,	
			SC	HEME OFASS	SESSME	ENT				
S. N	Io Method of Assessment		Description of	f Assessment		laximum Marks	Resour Requir			ernal / ternal
1	Paper pen tes		ne given learnin answer of ques	-	lents	10	Progres Test pay End ser exam	per/	Inter /Exte	
	A	DDITIO	NAL INSTRU	CTIONS FOR	THE HO	DD/ FAC	ULTY (IF A	ANY)		

RC	GPV (Diploma Bhop	$\mathcal{O}$	SCHEME FOR OU	R LEARNING JTCOME	Branc Cod P05	e Co	de	CO Code 04	LO Code <mark>01</mark>	Format No.4
COU	RSE NAME	COMP	UTER AIDED	rechnolog	IES			1 1		1
CO D	Description	Underst	and Group Tecl	hnology & Co	mputer	Aided P	roce	ss Plannir	Ig	
LO D			ction to Group 7	~	•				0	
	I		•	SCHEME OF	STUD	Y				
S. No.	Learning C	ontent	Teaching– Learning Method	Description Proces		Tea ch Hrs	Pra Tut	ct./ t Hrs.	LRs Required	Remarks
1	Introduction, p families, Desi attributes, Part classification & Coding system e.g. Hierarchic type & Hybrid system Benefit group technolo Coding system Opitz system, MICLASS sys CODE system of GT M/c cell	art gn& Mfg.Lecture methodt& coding, structure al, chain structure es of ogy. e.g.,tem of Types,		Teacher will e the contents students. The will learn abo Technology	to student			-	Book	
			SC	HEME OFASS	SESSM	ENT				
S. No	Method of Assessment		Description of	S Assessment	1	Maximur Marks	n	Resour ces Requir ed	External	/ Internal
1	Paper pen test/		ne given learnir answer of ques	-	dents	10		Progress ive Test paper/ End semester exam	Internal /External	

RC	GPV (Diploma V Bhopal	Wing)	SCHEME F	OR LI FCOM	/IE	Branch Code P05	Cours Code 504			.O ode	Format No.4
COL	JRSE NAME	COMP	UTER AIDE	D TE	CHNOLOGI	ES		I			
COI	Description	Unders	stand Group 7	echno	ology & Com	puter A	ided Pro	cess Plan	ning		
LO I	Description	Unders	stand Comput	er Aid	led Process P	lanning					
		1	1		CHEME OF S	U					
S. No.	Learning C	Content	Teachin Learnin Method	g	Description o Process	f T-L	Teach Hrs.	Pract./ Tut Hrs.	LR Re	s quired	Remarks
1	Introduction t planning, Rou Need of CAPI of CAPP Syst Retrieval CAI & Generative system, Benef CAPP System	nte sheet P, Type cem e.g.: PP syste CAPP fits of	t, Lecture s method	e the contents t		to tudents t ed	10	-	Har Boo	ndout, )k	
	•			SCHE	EME OFASSE	ESSME	NT				1
S. N	o Method of Assessment		Description	n of As	ssessment		aximum Aarks	Resou Requ			rnal / rnal
1	Paper pen test/		the given lear answer of qu	0	content, Stud ns	ents	10	Progree Test pa End semess exam	aper/	Interna /Extern	

RGPV (Diploma Wing Bhopal		0,	) SCHEME FOR LEARNING OUTCOME		Branch Code P05	Cours Code 504		Co	LO ode ) <mark>1</mark>	Format No.4	
COU	RSE NAME	COMP	UTER AIDED T	ECHNOLOG	IES		1			L.	
COI	Description	Unders	tand use of comp	outers for mana	aging Or	iality & ]	Resource <b>M</b>	Ianage	ment		
LOI	Description		w about quality i		0 0 0	v		0			
			1 1	SCHEME OF S							
S. No.	Learning Content		Teaching– Learning Method	Description of T-L Process		Teach Hrs.	Pract./ Tut Hrs.	LRs Required		Remarks	
1	<b>Concept of C</b> <b>CAQA &amp;CA</b> ,Concept, Sco Application, T	QC pe,	ed. Traditional Lecture method + Assignment	Teacher will e the contents students. Stud learn about qu management	s to lents will uality	10	-	Book			
			SCH	IEME OFASS	ESSME	NT					
S. No	Method of Assessment		Description of .	Assessment		laximum Marks	Resources Required		External / Internal		
1	Paper pen test		he given learnin answer of questi	0	Idents	10	Assigni End sen exam		Inter /Exte	ernal ternal	
	A	DDITIC	NAL INSTRUC	TIONS FOR 1	THE HO	D/ FACI	JLTY (IF A	ANY)			

CO5:LO2												
· 1	0/	SCHEME FOR LEARNING OUTCOME		Branch Code P05			LO Code <mark>02</mark>	FormatN 0.4				
JRSE NAME	COMPUT	TER AIDED TECHNOLOGIES										
CO Description Under		nderstand use of computers for managing Quality & Resource Management										
Description	To Know	about Resour	ce Managemer	nt tools.	•		<u> </u>					
			SCHEME (	OF STUD	Y							
Learning Content		Teaching– Learning Method	Description of T-L Process		Teach Hrs.	Pract./ Tut Hrs.	LRs Required	Remarks				
Concept of MRP, MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.		Traditional Lecture method	the contents to students. Students will learn about Resource		10		Book					
			SCHEME OFA	SSESSM	ENT							
		Description of Assessment		Maximum Marks		Resources Required	External / Internal					
Paper pen test				dents	10	Progressive Test paper/ End semester exam	Internal / External					
	GPV (Diploma Bhop JRSE NAME Description Description Learning C Concept of M MRP-II, ERI Evaluation, C Scope, Applic Tools used.	GPV (Diploma Wing) Bhopal       SG         JRSE NAME       COMPUT         Description       Understar         Description       To Know         Learning Content       Learning Content         Concept of MRP, MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.         o       Method of Assessment       I         Paper pen       For the	GPV (Diploma Wing) Bhopal       SCHEME FOR OU         JRSE NAME       COMPUTER AIDED T         Description       Understand use of com         Description       To Know about Resour         Learning Content       Teaching– Learning Method         Concept of MRP, MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.       Traditional Lecture method         v       Value of the size	GPV (Diploma Wing) Bhopal       SCHEME FOR LEARNING OUTCOME         JRSE NAME       COMPUTER AIDED TECHNOLOG         Description       Understand use of computers for mar         Description       To Know about Resource Management         Description       To Know about Resource Management         Description       Teaching– Learning Content       Description         Concept of MRP, MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.       Traditional Lecture method       Teacher will et the contents to students. Stud learn about Re Management         SCHEME OF A         Method of Assessment       Description of Assessment         Paper pen       For the given learning content, Stu	GPV (Diploma Wing) Bhopal       SCHEME FOR LEARNING OUTCOME       Branch Code P05         GPV (Diploma Wing) Bhopal       SCHEME FOR LEARNING OUTCOME       Branch Code P05         JRSE NAME       COMPUTER AIDED TECHNOLOGIES       Description         Description       Understand use of computers for managing Quarton To Know about Resource Management tools.       SCHEME OF STUD         Description       To Know about Resource Management tools.       SCHEME OF STUD         Learning Content       Teaching- Learning Method       Description of T-L Process         Concept of MRP, MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.       Traditional Learn about Resource Management tools.       Teacher will explain the contents to students. Students will learn about Resource Management tools.         SCHEME OFASSESSM       SCHEME OFASSESSM       Ma Ma         o       Method of Assessment       Description of Assessment       Ma Ma	GPV (Diploma Wing) Bhopal       SCHEME FOR LEARNING OUTCOME       Branch Code P05       Cours Code 504         JRSE NAME       COMPUTER AIDED TECHNOLOGIES       Understand use of computers for managing Quality & I         Description       Understand use of computers for managing Quality & I         Description       To Know about Resource Management tools.         Description       To Know about Resource Management tools.         Learning Content       Teaching- Learning Method       Description of T-L Process       Teach Hrs.         MRP-II, ERP, History, Evaluation, Concept, Scope, Application, Tools used.       Traditional Lecture method       Teacher will explain the contents to students. Students will learn about Resource Management tools.       10         SCHEME OF ASSESSMENT       SCHEME OF ASSESSMENT       Naximum Marks         Paper pen       For the given learning content, Students       10		$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				

## **Reference Books:**

- 1. http://en.wikipedia.org/wiki/CAx
- 2. GeroJohns, Artificial Intelligence in design
- 3. Lamit louis Garg, "Basic Pro engineer in 20 lessons Thomsonle
- 4. Shah Jami J., Parametric & Feature Based CAD/CAM Wiley International
- 5. Strockcheryl R, " Exercise workbook for beginning AutoCAD, Industrial Publication
- 6. Bannach Danid T, "Autodesk inventor from the top" Autodesk Publication