RGPV (DIPLO WING) BHOP		<b>OBE CURRICULUM FOR</b> Computer Graphics and Animation Technology	FORMAT-	Sheet No. 1/4
Branch		Computer Science and Engineering	Semester	VI
Course Code		Course Name	Computer Gr and Anima Technolog	tion
Course Outcome 1	Expla	ain the concept of Computer Graphics and their algorithms.	Hrs	Marks
Learning Outcome 1	Under	rstand Basics of Computer Graphics	06	10
Contents		tion of Computer Graphics, Application of Comput ics Hardware, Overview of Display Devices, Ras ns.	· ·	om Scans
Method of Assessment		Question Paper -External- RGPV End Sem T	heory Exam	1
Learning Outcome 2	Classi	fy Line-drawing Algorithms.	09	10
Contents	Points Algori	and Lines, Line-drawing Algorithms, DDA Algorithm	thm , Bresenh	nam's line
Method of Assessment		Internal Lab Test Practical Observa	tion.	
Learning Outcome 3	Demo	nstrate 2D and 3D Transformations.	06	10
Contents	Transl	ation, Rotation, Scaling, Shear, Reflection.		
Method of Assessment		Question Paper-Internal Progressive	Гest-I	-
Course Outcome 2		orate Clipping, Projection, Shading, Colour el and Illumination	Hrs	Marks
Learning Outcome 4	Identi	fy Clipping Algorithm.	06	10
Contents		Clipping, Line Clipping -Cohen-Sutherland Clippin ng: Sutherland Hodgeman Algorithm	g algorithm.,I	olygon
Method of Assessment		Question Paper-Internal Progressive T	est-II	
Learning Outcome 5	Comp	are Various Projection Techniques in detail.	06	10

Contents	Parallel Projection: Orthographic, Axonometric, Oblique Perspective Projection: Standard Perspective Projection, C Perspective Projection, Vanishing Points	General	
Method of Assessment	Question Paper -External- RGPV End Sem Th	neory Exam	1 <b>2</b>
Learning Outcome 6	Organize Shading and Colour model in detail.	06	10
	Chromaticity diagram-RGB, CMY, HSV, HLS Illumination models, shading models for polygons, Goura	ud and Pho	ngshading
Contents	indimitation models, shading models for porygons, obura		ig snauing
Method of Assessment	Question Paper -External- RGPV End Sem Th	neory Exam	3
Course Outcome 3	Illustrate Fundamental Multimedia Technology and Graphics Image File Formats.	Hrs	Marks
Learning Outcome 7	Explain Fundamental Multimedia Technology.	06	10
Contents	Concepts of Multimedia: Types, Hardware and Softw Applications, Multimedia Authoring and their tool, MII Hardware and Software.	-	
Method of Assessment	Question Paper -External- RGPV End Sem Th	neory Exam	4
Learning Outcome 8	Discuss Over view of Types of compression.	06	10
Contents	Over view of Types of compression Technique(Lossy and I Video Compression, MPEG and JPEG Compression Basic Hypertext and Hypermedia.		
Method of Assessment	Internal – Term Work Assignment	t.	
Learning Outcome 9	Distinguish Graphics Image File Formats.	06	10
Contents	Raster Format, Bitmap (BMP) Format, Graphics Intercha Joint Photographic Experts Group (JP EG), Tagged Image Portable Network Graphics (PN G) and their differences		
Method of Assessment	Question Paper -External- RGPV End Sem Th	ieory Exam	5
Course Outcome 4	Illustrate fundamental of animation and thei technology.	r Hrs	Marks

Learning Outcome 10	Understand the need of Animation.	06	10
Contents	Principles of Animation, characteristics of animatio	ns, Applic	ations of
	Animation, limitation of animation.		
Method of Assessment	Question Paper -External- RGPV End Sem The	eory Exam	6
Learning Outcome 11	Classify various animation techniques.	06	10
Contents	Types of animation: Traditional Animation, 2D anima motion graphics, and stop motion animation, text animation		animation,
Method of Assessment	Question Paper -External- RGPV End Sem The	eory Exam	7
Learning Outcome 12	Make use of various techniques for animation.	09	10
Contents	Animation techniques: techniques to create animation, Key Timeline, Deformations, Character Animation, Physics-Ba Procedural Techniques, Groups of Objects.	0,	•
Method of Assessment	Internal Lab Test Practical Observati	on.	
Course Outcome 5	Develop 2D animation applications.	Hrs	Marks
Learning Outcome 13	Select software for computer animation.	09	10
Contents	• 2D animation software, 2D Animation- introduction	on with Vis	ual Studio
	Flash, Animaker, pencil2d,CrazyTalk Animator, fli	pbook.	
	• 3D Animation- Introduction to blender- work envir	onment.	
Method of Assessment	External Lab Test Observation		
Learning Outcome 14	Apply 2D computer animation techniques	09	10
Contents	Flash Basics: Flash Work Flow, Animation Using Flash. The Flash Work Environment: The Stage and the Time Instances, Symbols and Interactive Movies, Using th Working the Frames using time line.		
Method of Assessment	External Lab Test Observation		

Learning Outcome 15	Create 2D computer animation application.	09	10
Contents	Creating Animations: Creating Key Frames, Layers in Ani Rates, Frame Rates, and Steps for creating animations. Fra Animations.		
Method of Assessment	External Lab Test Observation		

## **PRACTICAL FOR ANIMATION:**

- 1. Write a program for 2D line  $\overline{\text{dra}}$  wing using DDA Algorithm.
- 2. Write a program for 2D line drawing using Brsenham's Algorithm.
- 3. Create animations using Adobe FLASH. Flash Drawing and Painting Tools. Flash Drawing Modes. Pencil Tools.
- 4. Importing artwork into Flash.
- 5. Perform smiling face/Angry face animation using flash.
- 6. Draw the moving Car/Bike/Cycle on the screen.

## **BOOKS RECOMMANDED.**

- Computer Graphics, Multimedia and Animations by Malay K. Pakhira, PHI Learning.
- Computer Graphics by Donald Hearn and M.Pauline Baker, PHI
- Computer Graphics Principles and Practices second edition by James D. Foley, Andeies van Dam, Stevan K. Feiner and Johb F. Hughes, 2000, Addition Wesley.
- https://www.technicalcube.in/animation-book-pdf-download
- Introduction to Computer Graphics By N. Krishnamurthy T.M.H
- Graphics, GUI, Games & Multimedia Projects in C by Pilania & Mahendra, Standard Pub
- Newman W.M. and Sproull R.F., "Principles of Interactive Computer Graphics ", Second Edition, *Tata McGraw Hill Publishing Company Limited, New Delhi*,
- Multimed ia on the PC, Sinclair, BPB
- Multimedia in Practice by Jeff coate Judith, 1, PHI.
- •Multimedia Systems by Koegel, AWL
- Multimedia Making it Work by Vaughar, etl
- Principles of Multimedia by Ranjan Parekh, *Tata McGraw Hill Education Private Limited,* New Delhi.

	(Dinlon	na Wing ) Bhopal	SCH	IEME FOR LEAR	NING	Bra	inch C	ode	Co	ourse C	ode	CO Code	LO Code	1
NGPV				OUTCOME		С	0	4				1	1	Format No. <b>4</b>
Course	Name		C	OMPUTER GRAPH	HICS AN	D AN	IMA	TIOI	N TEO	CHNC	OLOG	ĞΥ		
CO Des	cription	Explain the concept o	f Compı	iter Graphics and th	eir algor	ithms								
LO Des	cription	Understand Basics of C	omputer	Graphics.										
				SCHEME	OF STU	DY								
S. No.	Learning	g Content		Teaching – Learning Method	Descrip Process		f T-L	Tea Hrs	ach 5.	Prac Tut.	•	LRs R	equired	Remarks
1	App     Grap     Disp	nition of Computer Grap lication of Computer Gra phics Hardware, Overvie play Devices, Raster and dom Scans Systems.	phics,	Traditional Lecture method + Handout	Teacher will explain the contents and provide handout to students.			6 0			0	Hande Books Conte	s / E-	NIL
				SCHEME OF	ASSESS	MEN	т							
S. No.	Method	of Assessment	Descrip	ntion of Assessment	-	iximu Aarks	m		Reso	urces	Requi	red	Exte	rnal / Internal
1	END SE	CM THEORY EXAM	Questic	on Paper .		10			r	Гest Р	aper			External
		ADDI	TIONAI	LINSTRUCTIONS F	OR THE	HOD	/ FA	CUL	TY (IF	ANY	)			
							-		•		-			

	/ (Diplo	ma Wing ) Bhopal	SCHEME FOR LEAR	NING	Branch Co	ode C	ourse Code	CO Code	LO Code	1
NGP		ina wing j bilopai	OUTCOME		C 0	4		1	2	Format No. <b>4</b>
Course	Name		COMPUTER GRAPI	HICS AN	D ANIMA	FION TE	CHNOLO	GY		
CO Des	cription	Explain the concept o	f Computer Graphics and th	neir algor	ithms.					
LO Des	cription	Classify Line-drawing	g Algorithms.							
			SCHEME	OF STU	DY					
S. No.	Learning	g Content	Teaching – Learning Method	Descript Process	ion of T-L	Teach Hrs.	Pract./ Tut. Hrs	LRs R	equired	Remarks
1	Algo Algo					9	0	Hand Book Conte	s / E-	Teacher may use working animation for Searching techniques
			SCHEME OF	ASSESS	MENT					
S. No.	Method	of Assessment	Description of Assessment		ximum 1arks	Reso	ources Requ	iired	Exte	ernal / Internal
1	LAB W	B WORK Student will be asked towrite program for line 10 Lab Test drawing algorithm.							Internal	
		ADDI	TIONAL INSTRUCTIONS F	OR THE	HOD/ FAG		F ANY)			

	/ (Dinlo	ma Wing ) Bhopal	SCHEME FOR LEAF	RNING	Branch Co	ode	Course Code	CO Code	LO Code	/
			OUTCOME		C 0	4		1	3	Format No. <b>4</b>
Course	Name		COMPUTER GRAP	HICS AN	ID ANIMA	ΓΙΟΝ Τ	ECHNOLO	GY		
CO Des	cription	Explain the concept of	f Computer Graphics and t	heir algor	rithms.					
LO Desc	cription	Demonstrate 2D and 3	BD Transformations.							
			SCHEM	E OF STU	IDY					
S. No.	Learning	g Content	Teaching – Learning Method	Descrip Process	tion of T-L	Teach Hrs.	Pract./ Tut. Hrs	LRs R	equired	Remarks
1		nslation, Rotation, Scaling ar, Reflection.		Teacher explain contents provide students	the s and handout to	6	0	Hand Book Conte	s / E-	NIL
			SCHEME O	F ASSESS	MENT					
S. No.	Method	of Assessment	Description of Assessment	_	aximum Marks	Re	sources Requ	iired	Exte	ernal / Internal
1	PROGR	RESSIVE TEST-I	Student will be asked to perform Translation, Rotation, Scaling, Shear, Reflection.		10 Test Paper/			Quiz Internal		
		ADDI	TIONAL INSTRUCTIONS	FOR THE	HOD/ FAG		IF ANY)			

Dinlow	na Wing ) Bhopal	SCH	HEME FOR LEAR	NING	Bra	anch C	ode	Cou	rse Cod	Δ	CO Code	LO Code	<b>/</b>
Dipion			OUTCOME		С	0	4				2	4	Format No. <b>4</b>
ame		С	OMPUTER GRAPH	HICS AN	D AN	IMA	TION 7	TECI	HNOL	OGY			
iption	Elaborate Clipping, l	Projectio	n, Shading, Colour	model a	nd Ill	umina	ation.						
iption	Identify Clipping Alg	orithm.											
			SCHEME	OF STU	DY								
Learning	Content		Teaching – Learning Method	•		of T-L	Teach Hrs.		•		.Rs Ro	equired	Remarks
Cohe algoi	en-Sutherland C lipping rithm., Polygon C lippir	ıg:	Traditional Lecture method + Handout	explain contents provide	the and handout to		6		0	I	Handouts / Books / E- Contents		NIL
			SCHEME OF	ASSESS	MEN	T							
Method	of Assessment	Descrip	otion of Assessment	-	-		Re	esour	ces Re	quire	d	Exte	rnal / Internal
PROGR	ESSIVE TEST-II	toclippi	ing on given		10			Te	est Pap	er			Internal
	ADD	ITIONAI	L INSTRUCTIONS F	OR THE	HOD	)/ FA	CULTY	(IF A	ANY)				
						-		•					
	ame ption ption earning Poin Cohe algor Suth	ame         ption       Elaborate Clipping, I         ption       Identify Clipping Alg         .earning Content         Point Clipping, Line C lipping         algorithm., Polygon C lipping         Sutherland Hodgeman Algor         Method of Assessment         PROGRESSIVE TEST-II	ame       C         ption       Elaborate Clipping, Projectio         ption       Identify Clipping Algorithm.         ption       Identify Clipping Algorithm.         .earning Content	Ame     COMPUTER GRAPH       ption     Elaborate Clipping, Projection, Shading, Colour       ption     Identify Clipping Algorithm.       ption     Identify Clipping Algorithm.       SCHEME       earning Content     Teaching – Learning Method       • Point Clipping, Line C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Lecture method + Handout       SCHEME OF       Method of Assessment     Description of Assessment coordinates.	OUTCOME         ame       COMPUTER GRAPHICS AN         ption       Elaborate Clipping, Projection, Shading, Colour model an         ption       Identify Clipping Algorithm.         SCHEME OF STU         earning Content       Teaching –       Description         Point Clipping, Line C lipping -       Traditional       Teacher         Cohen-Sutherland C lipping       Traditional       Teacher         Sutherland Hodgeman Algorithm.       Handout       provide         Student will be asked       Student will be asked       Mandout         PROGRESSIVE TEST-II       Student will be asked       Mandout	OUTCOME     c       ame     COMPUTER GRAPHICS AND AN       ption     Elaborate Clipping, Projection, Shading, Colour model and Ill       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       eearning Content       Point Clipping, Line C lipping -     Traditional       Cohen-Sutherland C lipping     Traditional       Lecture     explain the       sutherland Hodgeman Algorithm.     Teacher will       SCHEME OF ASSESSMEN       Method of Assessment     Description of Assessment       PROGRESSIVE TEST-II     Student will be asked       toclipping on given     10	OUTCOME     C     0       ame     COMPUTER GRAPHICS AND ANIMA       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumina       ption     Identify Clipping Algorithm.       ption     Identify Clipping Algorithm.       searning Content     Teaching – Learning Method       Point Clipping, Line C lipping - Cohen-Sutherland C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Lecture method + Handout     Teacher will explain the contents and provide handout to students.       SCHEME OF ASSESSMENT       Method of Assessment     Description of Assessment Colipping on given coordinates.     Maximum Marks	OUTCOME     C     0     4       ame     COMPUTER GRAPHICS AND ANIMATION T       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumination.       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       eearning Content     Teaching – Learning Method       Point Clipping, Line C lipping - Cohen-Sutherland C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Handout     Teacher will explain the contents and provide handout to students.     6       SCHEME OF ASSESSMENT     Schement     Maximum Marks     Reference Marks       PROGRESSIVE TEST-II     Student will be asked toclipping on given coordinates.     Maximum 10     Reference Marks	OUTCOME     C     0     4       ame     COMPUTER GRAPHICS AND ANIMATION TECH       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumination.       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       earning Content     Teaching – Learning Method       Point Clipping, Line C lipping - Cohen-Sutherland C lipping algorithm., Polygon C lipping:     Traditional Method + Handout     Teacher will explain the contents and provide handout to students.     6       SCHEME OF ASSESSMENT       Method of Assessment     Description of Assessment coordinates.     Maximum Marks     Resour Marks	OUTCOME     C     0     4       ame     COMPUTER GRAPHICS AND ANIMATION TECHNOL       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumination.       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       eearning Content     Teaching – Learning Method     Description of T-L Process     Teach Hrs.     Pract./ Tut. Hi       • Point Clipping, Line C lipping - Cohen-Sutherland C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Handout     Contents and provide handout to students.     6     0       SCHEME OF ASSESSMENT       Wethod of Assessment     Description of Assessment toclipping on given     Maximum Marks     Resources Res	OUTCOME     C     0     4       ame     COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumination.       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       earning Content     Teaching – Learning Method       Point Clipping, Line C lipping - Cohen-Sutherland C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Lecture method + Handout     Teacher will explain the contents and provide handout to students.     6     0     I I G       SCHEME OF ASSESSMENT       Method of Assessment     Description of Assessment Marks     Maximum Marks     Resources Require Marks       PROGRESSIVE TEST-II     Student will be asked toclipping on given coordinates.     10     Test Paper	OUTCOME     C     0     4     2       ame     COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumination.       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       eerning Content     Teaching - Learning Method     Description of T-L Process     Teach Hrs.     Pract./ Tut. Hrs     LRs R Tut. Hrs       • Point Clipping, Line C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Lecture method + Handout     Teacher will explain the contents and provide handout to students.     6     0     Hand. Books Contents       SCHEME OF ASSESSMENT       Wethod of Assessment     Description of Assessment Student will be asked toclipping on given coordinates.     Maximum Marks     Resources Required	OUTCOME     C     0     4     2     4       ame     COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY       ption     Elaborate Clipping, Projection, Shading, Colour model and Illumination.       ption     Identify Clipping Algorithm.       SCHEME OF STUDY       earning Content     Teaching - Learning Method       Point Clipping, Line C lipping - Cohen-Sutherland C lipping algorithm., Polygon C lipping: Sutherland Hodgeman Algorithm.     Traditional Lecture method + Handout     Teacher will explain the contents and provide handout to students.     6     0     Handouts / Books / E- Contents       SCHEME OF ASSESSMENT     SCHEME OF ASSESSMENT     Externation of Assessment     Maximum Marks     Resources Required Test Paper

	/ (Diplo	ma Wing ) Bhopal	SC		NING	Bra	nch	Cod	le	Cour	rse Co	ode	CO Code	LO Code	- · · · · <b>/</b>
				OUTCOME		С	0		4				2	5	Format No. <b>4</b>
Course	Name		C	COMPUTER GRAPH	IICS AN	D AN	IMA	١T	ION T	ECI	HNO	LOC	GΥ		
CO Des	cription	Elaborate Clipping, P	rojectio	on, Shading, Colour	model a	nd Ill	umir	ıati	ion.						
LO Des	cription	Compare Various Pro	jection	Techniques in detail.											
				SCHEME	OF STU	DY									
S. No.	Learning	g Content		Teaching – Learning Method	Descrip Process		f T-L		Teach Hrs.		Prac Tut.	-	LRs R	equired	Remarks
1	Axo     Pers     Pers	llel Projection: Orthogra nometric, Oblique pective Projection: Stand pective Projection, Gene pective Projection, Vanis tts	lard ral	Traditional Lecture method + Handout	Teacher explain contents provide students	the s and hando	out to	D	6		(	)	Hand Book Conte	s / E-	NIL
				SCHEME OF	ASSESS	MEN	Т								
S. No.	Method	of Assessment	Descri	ption of Assessment		aximu Marks	m		Re	sour	ces l	Requi	red	Exte	ernal / Internal
1	END SF	CM THEORY EXAM	toperfo	t will be asked orm various projection en coordinates.		10				Те	est Pa	aper			External
		ADDI	TIONA	L INSTRUCTIONS F	OR THE	HOD	)/ FA	٩CI	ULTY	(IF A	ANY)				
RGD\/	(Dinlon	na Wing ) Bhopal	SC		NING	Bra	nch	Cod	le	Cour	rse Co	ode	CO Code	LO Code	Format No. <b>4</b>
				OUTCOME		С	0		4				2	6	Format No. 🕇
Course	Name		C	COMPUTER GRAPH	IICS AN	D AN	IMA	ATI	ION T	ECI	HNO	LOC	GΥ	1	

LO DES	cription	Organize Shaung and	d Color model in detail.					
			SCHEM	E OF STUDY				
S. No.	Learning	; Content	Teaching – Learning Method	Description of T-L Process	Teach Hrs.	Pract./ Tut. Hrs	LRs Required	Remarks
1	• Illun mod	omaticity dia gram- RGE Y, HSV, HLS nination models, shading els for gons,GouraudandPhong ing.	g Lecture method + Handout	Teacher will explain the contents and provide handout to students.	6	0	Handouts / Books / E- Contents	NIL
	1		SCHEME O	FASSESSMENT	I			
S. No.	Method	of Assessment	Description of Assessment	Maximum Marks	Resc	ources Requi	ired Exte	rnal / Internal
1	END SE	CM THEORY EXAM	Student will be asked to define NLP and various techniques used in NLP.	10		Test Paper		External
		ADD	ITIONAL INSTRUCTIONS	FOR THE HOD/ FAC	CULTY (II	F ANY)		

	/ (Diplo	ma Wing ) Bhopal	SCHEME FOR LEAR	NING	Branch Co	ode	Course Cod	e CO Cod	LO Code						
NGPV		ina wing j bilopai	OUTCOME		C 0	4		3	7	Format No. <b>4</b>					
Course	Name		COMPUTER GRAPH	COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY											
CO Des	cription	Illustrate Fundament	al Multimedia Technology a	nd Grap	hics Image	File For	mats.								
LO Deso	cription	Explain Fundamental	Multimedia Technology.												
			SCHEME	OF STU	IDY										
S. No.	Learning	g Content	Teaching – Learning Method	Descrip Process	tion of T-L	Teach Hrs.	Pract., Tut. H		Required	Remarks					
1	Haro Req Mul tool,	cepts of Multimedia: Tyj dware and Software uirements and Applicatio timedia Authoring and th MIDI File Formats, MI dware and Software.	pes, Traditional Lecture ons, method + neir Handout	Teacher explain content provide students	the s and handout to	6	0	Boo	douts / ks / E- tents	NIL					
			SCHEME OF	ASSESS	SMENT										
S. No.	Method	of Assessment	Description of Assessment		aximum Marks	Res	ources Re	quired	Ext	ernal / Internal					
1	END SE	EM THEORY EXAM	Student will be asked to explain Types, Hardware and Software Requirements and Applications, Multimedia.		10		Test Pap	er		Internal					
		ADDI	TIONAL INSTRUCTIONS F	OR THE	HOD/ FAG	CULTY (	IF ANY)		1						

RGP	/ (Dinlo	ma Wing ) Bhopal	SCH	IEME FOR LEAR	NING	Bra	inch C	ode	Со	ourse Co	ode	CO Code	LO Code	Format No. <b>4</b>
				OUTCOME		С	0	4				3	8	
Course	Name		C	OMPUTER GRAPH	HICS AN	D AN	IMA	TION	TEC	CHNO	LOG	ĞΥ		
CO Des	cription	Illustrate Fundamenta	l Multi	media Technology a	nd Grap	hics I	mage	File F	orm	ats.				
LO Des	cription	Discuss Over view of T	Types of	compression.										
				SCHEME	OF STU	DY								
S. No.	Learning	g Content		Teaching – Learning Method	Descrip Process		f T-L	Teac Hrs.	h	Prac Tut.	•	LRs R	equired	Remarks
1	• Vide JPE	r view of Types of compr nnique(Lossy and Lossyle eo Compression, MPEG G Compression Basics ertext and Hypermedia	ess),	Traditional Lecture method + Handout	l Teacher will explain the			6	5	C		Hando Books Conte		NIL
				SCHEME OF	ASSESS	MEN	т							
S. No.	Method	of Assessment	Descrip	tion of Assessment	-	iximu Aarks	m	F	Reso	urces F	Requi	red	Exte	ernal / Internal
1	TERM WORK expla			will be asked to types of ssion.	will be asked to types of 10			Assi	ignmei	nt/Qu	uiz Internal			
		ADDI	ΓΙΟΝΑΙ	INSTRUCTIONS F	OR THE	HOD	/ FA		r (IF	ANY)				

RGPV (Diploma Wing ) Bhopal		SCHEM	CHEME FOR LEARNING		Branch Code			e Course Code			CO LO Code Code				
KGPV	י (טוסוט)	ma wing ) Bhopai	OUTCOME			С	0	4				3	9	Format No. <b>4</b>	
Course I	Name		COMP	COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY											
CO Desc	cription	Illustrate Fundament	al Multimedia	ltimedia Technology and Graphics Image File Formats.											
LO Desc	ription	Distinguish Graphics	Image File Fo	ormats.											
				SCHEME	OF STU	DY									
5. No.	Learning	; Content		Teaching – rning Method	Descrip Process		f T-L	Teacl Hrs.		Pract./ Tut. Hrs		LRs R	equired	Remarks	
<ul> <li>Raster Format, Bitmap (BMP) Format, Graphics Interchange Format (GIF),</li> <li>Joint Photographic Experts Group (JP EG),Tagged Image File Format (TIFF),</li> <li>Portable Network Graphics (PN G) and their differences.</li> </ul>				Traditional Lecture method + Handout	Teacher explain contents provide students	the s and hando	out to	6		0		Handouts / Books / E- Contents		NIL	
				SCHEME OF	ASSESS	MEN	т								
5. No.	Method of Assessment Descrip			ption of Assessment		Maximum Marks			Resources Requi			ired External / Inte			
l	END SE	CM THEORY EXAM		will be asked tote on Image File10				Test Paper					External		
		ADDI	TIONAL INS	TRUCTIONS F	OR THE	HOD	/ FA(	CULTY	(IF /	ANY)					

<b>/</b>		LO Code	CO ode		ode	ourse (	Со	de	Сос	anch	Bra	NING	CHEME FOR LEARNI		na Wing ) Bhopal	RCDV (Dinloma	
Format No. <b>4</b>	F	10	4					4		0	С		OUTCOME		na wing j bilopai		NGPV
	COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY											С		Name	Course		
												nology.	mation and their tech	l of anir	Illustrate fundamenta	cription	CO Des
													nation.	of Anim	Understand the need	cription	LO Des
											DY	OF STU	SCHEME				
Remarks	d	equirec	Rs Re		•	Pra Tut		Teacl Hrs.	-	of T-L		Descrip Process	Teaching – Learning Method		g Content	Learning	S. No.
NIL	douts / N ks / E- tents		ooks	Boo			6	0	Teacher will explain the contents and provide handout to students.			Traditional Lecture method + Handout	,	• Principles of Animation, characteristics of animations, Applications of Animation, limitation of animation.			
										JT	MEN	ASSESS	SCHEME OF				
nal / Internal	ern	Ext	I	uire	Req	urces	Reso	R			aximu Marks		ption of Assessment	Descrip	of Assessment	Method	S. No.
xternal	External			r	Test Paper								<b>END SEM THEORY EXAM</b> applica				
					<b>')</b>	ANY	Y (IF	ULTY		)/ F/	НОГ	OR THE	L INSTRUCTIONS FO	TIONAI	ADDI		
×.	E:			r	•			CULTY	AC	)/ F/		OR THE	ation and limitation of tion.	applica animati		END SE	1

RGPV (Diploma Wing ) Bhopal     OUTCOME     C     0     4       Course Name     COMPUTER GRAPHICS AND ANIMATION TECHNOLO       CO Description     Illustrate fundamental of animation and their technology.       LO Description     Classify various animation techniques.       SCHEME OF STUDY       S. No.     Learning Content     Teaching – Learning Method     Description of T-L Process     Teach Hrs.     Pract./ Tut. Hrs       1     • Types of animation: Traditional Animation, 2D animation, 3D     Traditional Lecture     Teacher will explain the     6     0	LRs R	Required	Format No.4
CO Description       Illustrate fundamental of animation and their technology.         LO Description       Classify various animation techniques.         SCHEME OF STUDY         S. No.       Learning Content       Teaching – Learning Method       Description of T-L Process       Teach Hrs.       Pract./ Tut. Hrs         1       • Types of animation: Traditional Animation, 2D animation, 3D       Traditional Lecture       Teacher will explain the       6       0	LRs R	Required	Remarks
LO Description       Classify various animation techniques.         SCHEME OF STUDY         S. No.       Learning Content       Teaching – Learning Method       Description of T-L Process       Teach Hrs.       Pract./ Tut. Hrs         1       • Types of animation: Traditional Animation, 2D animation, 3D       Traditional Lecture       Teacher will explain the       6       0		Required	Remarks
S. No.     Learning Content     Teaching – Learning Method     Description of T-L Process     Teach Hrs.     Pract./ Tut. Hrs       1     • Types of animation: Traditional Animation, 2D animation, 3D     Traditional Lecture     Teacher will explain the     6     0		Required	Remarks
S. No.Learning ContentTeaching – Learning MethodDescription of T-L ProcessTeach Hrs.Pract./ Tut. Hrs1• Types of animation: Traditional Animation, 2D animation, 3DTraditional LectureTeacher will explain the60		Required	Remarks
Learning MethodProcessHrs.Tut. Hrs1• Types of animation: Traditional Animation, 2D animation, 3DTraditional LectureTeacher will explain the60		Required	Remarks
1• Types of animation: Traditional Animation, 2D animation, 3DTraditional LectureTeacher will explain the60	Hand		
animation, motion graphics, and stop motion animation, text animationmethod + Handoutcontents and provide handout to students.	Handouts / Books / E- Contents		NIL
SCHEME OF ASSESSMENT			
S. No. Method of Assessment Description of Assessment Marks Resources Requ	iired	ernal / Internal	
1END SEM THEORY EXAMStudent will be asked to list types of animation.10Test Paper	1		External
ADDITIONAL INSTRUCTIONS FOR THE HOD/ FACULTY (IF ANY)			

RGPV (Diploma Wing ) Bł		na Wing ) Bhonal	SCHEME FOR L	EARNING	IING Branch Coo		Course Co	ode	CO Code	LO Code					
			OUTCON	ИE	C 0	4			4	12	Format No. <b>4</b>				
Course l	Name		COMPUTER GR	RAPHICS AN	D ANIMA	ΓΙΟΝ ΤΙ	ECHNO	LOG	ξY	1 1					
CO Desc	cription	Illustrate fundamenta	tal of animation and their technology.												
LO Desc	cription	Make use of various to	echniques for animation	n.											
			SCH	EME OF STU	DY										
S. No.	Learning	g Content	– Teaching Learning Meth	-	tion of T-L	Teach Hrs.	Prac Tut.	•	LRs R	equired	Remarks				
1	to cr Stag Char Base	nation techniques: techni eate animation, Key fram e, Timeline, Deformation racter Animation, Physic ed Animation, Procedura miques, Groups of Objec	hing, Lecture ns, method + S- Handout	explain contents	the and handout to	9	Во			outs / s / E- ents	NIL				
			SCHEM	E OF ASSESS	MENT										
S. No.	Method	of Assessment	ont	iximum Aarks	Res	ources F	Requi	red	ernal / Internal						
1	LAB W	ORK	Student will be asked to animation techniques us to create animation.		10	L	ab Assig	gnme	nt	Internal					
		ADDI	TIONAL INSTRUCTIO	NS FOR THE	HOD/ FA	CULTY (	F ANY)								

RGDV (Dinlor		na Wing ) Bhopal	SCHEME FOR LEAF	RNING	NING Branch Coo		ode	Co	Course Code		CO Code	LO Code	/	
			OUTCOME	OUTCOME			4				5	13	Format No. <b>4</b>	
Course	Name		COMPUTER GRAP	COMPUTER GRAPHICS AND ANIMATION TECHNOLOGY										
CO Des	cription	Develop 2D animation	n applications.											
LO Deso	cription	Select software for co	mputer animation.											
			SCHEME	OF STU	DY									
S. No.	Learning	g Content	Teaching – Learning Method	Descrip Process		f T-L	Te Hr	ach s.	Pra Tut	ct./ Hrs	LRs R	equired	Remarks	
1	Anin Visu pence flipb • 3D 4	animation software, 2D mation- introduction with al Studio Flash, Animak cil2d,CrazyTalk Animato book. Animation- Introduction der- work environment.	r, method + Handout	Teacher explain contents provide students	ain the ents and ide handout to			9 0		0	Handouts / Books / E- Contents		NIL	
			SCHEME OF	ASSESS	MEN	T								
S. No.	Method	of Assessment	f Assessment Description of Assessment				Resources Required				External / Internal			
1	END SE	CM PRACTICAL		10		Lab Test Pape				er	er External			
			TIONAL INSTRUCTIONS I	FOR THE	HOD	) FA	сі II .	<b>L</b>	ΔΝΥ	)				

RGPV (Dinlor		na Wing ) Bhopal	SCHI	CHEME FOR LEARN		NING Branch Cod		ode	Course Code		CO Code	LO Code	Format No.
				OUTCOME			0	4			5	14	Format No. <b>4</b>
Course	Name		CO	MPUTER GRAPI	HICS AN	D AN	IMA	ΓΙΟΝ Ί	ECH	NOLO	GY		
CO Des	cription	Develop 2D animation	n applicati	ions.									
LO Desc	cription	Apply 2D computer a	animation	techniques.									
				SCHEME	OF STU	DY							
S. No.	Learning	g Content		Teaching – Learning Method	Descrip Process	tion o	of T-L	Teach Hrs.		ract./ ut. Hrs	LRs R	equired	Remarks
1	Anin • The Stag and Inter Box	h Basics: Flash Work Fle nation Using Flash. Flash Work Environmer e and the Time Line, Syn Instances, Symbols and ractive Movies, Using th , Using Working the Fra- g time line.	nt: The mbols e Tool	Traditional Lecture method + Handout	explain contents	eacher will splain the ontents and rovide handout to udents.			9 0		Handouts / Books / E- Contents		NIL
				SCHEME OF	ASSESS	MEN	IT						
S. No.	Method	d of Assessment Description of Assessment				Maximum Marks			sourc	es Requ	ired External / Inter		
1	END SE	EM PRACTICALStudent will be asked various method for 2D animation creation.				10	Lab Test Pap				er External		
		ADD		INSTRUCTIONS F	OR THE	HOD	)/ FA(	CULTY	(IF AI	NY)			

	Dinlon	na Wing ) Bhopal	SCH	HEME FOR LEAR	NING	G Branch Co		ode	Course Co		CO Code	LO Code	
		ia wilig / bilopai		OUTCOME	С	0	4			5	15	Format No. <b>4</b>	
Course N	lame		С	OMPUTER GRAPH	HICS AN	D AN	IMA	ΓΙΟΝ Τ	ECHN	OLOO	GΥ		
CO Descr	ription	Develop 2D animatio	n applica	ations.									
O Descri	ription	Create 2D computer	animatio	on application.									
				SCHEME	OF STU	DY							
5. No.	Learning	g Content		Teaching – Learning Method	Descrip Process		of T-L	Teach Hrs.	Pra Tut	ct./ . Hrs	LRs R	equired	Remarks
	<ul> <li>Creating Animations: Creating Key Frames, Layers in Animations, Frame Rates, Frame Rates, and Steps for creating animations. Frame by Frame Animations.</li> <li>Publishing and Exporting.</li> </ul>			Traditional Lecture method + Handout	explain contents provide	Teacher will explain the contents and provide handout to students.			9 0			outs / s / E- ents	NIL
				SCHEME OF	ASSESS	MEN	T						
5. No.	Method of Assessment Descri			otion of Assessment	Maximum Marks			Re	sources	Requi	ired	rnal / Internal	
t I	END SE	CM PRACTICAL	t will be asked basic mation using flash re.		10		I	ab Tes	t Pape	er	External		
		ADD		L INSTRUCTIONS F	OR THE	HOD	)/ FA	CULTY	IF ANY	<b>')</b>			