GOVERNMENT OF TAMILNADU
DIRECTORATE OF TECHNICAL EDUCATION,CHENNAI
STATE PROJECT COORDINATION UNIT
(Established under Canada India Institutional Cooperation Project)

CURRICULUM

Course Name	ADVANCE MULTIMEDIA AND DRAWING
Course Code	CSE/2020/023
Course Duration	80 Hours
Minimum Eligibility Criteria and Pre-requisites(if any)	ITI/10th/+2/Diploma/Graduates Basics Concepts of computers
Course Objectives	The main objective of the course is to train the students to acquire basic knowledge of Advance Multimedia Systems using GIMP, INKSCAPE, BLENDER,QCAD, KRITA. This course also describes major details about Drawing tools used for multimedia applications and development.
Course Outcomes	The students will able to know the Basic of Multimedia Software. This course will provide the brief knowledge of the various tools in the mentioned multimedia software's.
Expected Job Roles	Multimedia Developer and designer

TEACHING AND SCHEME OF EXAMINATION					
Course Code	Course Name	Hours	Assessment Marks		Duration of Examination
			Min	Max	
CSE/2020/023	Advance Multimedia and Drawing	Theory	30	10	20	3 Hours
		Practical	50	40	80	
		Total	80	50	100	

ADVANCE MULTIMEDIA AND DRAWING

DETAILED SYLLABUS

UNIT NO	MODULES	NO.OF.HOURS THEORY
I	GIMP	
	Introduction about GIMP - Setting up GIMP- Features and capabilities-layers-Improving digital photos - basic shapes- Filters and Effects- Color manipulation, channels and layers modes – Advanced Compositing- Plug ins and Scripting.	6
II	INKSCAPE:	
	Overview of Inkscape- Objects- Transforming –Snapping and arranging- styling- Stoke and markers- gradients and patterns- shapes- Editing paths- Path effects and extensions – Drawing- Text – Clones – Filters – Bitmaps.	6
III	BLENDER:	
	Introduction about blender –Features of blender – Blender interface - special tools – Outlined – Basic modelling and shading– Changing views – Grabbing, scaling, rotating– Manipulators–Texture	6
IV	QCAD	
	Introduction about QCAD –Drawing methods – Modification tools –Drawing methods – Tool bar –Layers – Object snap – Basic CAD concept	6
V	KRITA	
	Introduction about krita -System requirements- Brushes – Resource sharing and tagging – Tools – Dockers – Layers – Generators	6
	Total Theory Hours	**30**
	Total Practical Hours	**50**
	Total Hours	**80**

PRACTICAL (50 Hours)

1. Rotating and Cropping an image in GIMP

2. Tricks to draw a straight line and line with gradi in GIMP

3. Working with layers , add a layer mask in GIMP

4. Using layers healing cloning tools in GIMP

5. Color dialoge box select colors in six different way using GIMP

6. How to fill colour in objects, give objects an outline, various types of gradients, giving patterns and stoke paint and style in INKSCAPE

7. Using INKSCAPE tools to manipulation a text

8. Create and edit a multiple objects using INKSCAPE

9. To design a CD lable and visiting card using INKSCAPE

10. How to install and configuring the blender in windows

11. Using 3D cursor while modelling/ animating to add a new object using BLENDER

12. Drawing method in QCAD

13. Using Modification tools to scaling and rotating in QCAD

14. Create an object using mask in KRITA

15. Using filters concept design an object in KRITA

HARDWARE REQUIREMENT

S.NO	LIST OF TOOLS /EQUIPMENTS
1	Desktop /Laptop computers

SOFTWARE REQUIREMENT

S.NO	LIST OF SOFTWARE
1	Open Source Design *Software*. *Krita*; *Gimp*; *Inkscape*; Blender;
2	*QCad* community edition is a simple open source 2-D CAD

REFERENCE BOOKS

S.NO	NAME OF THE BOOK	AUTHOR	PUBLISHER
1.	Beginning Photo Retouching and Restoration Using GIMP	Phillip Whitt	Mc Graw Hill Publications.
2.	Inkscape Beginner's Guide The Complete Guide to Blender	Bethany Hiitola – 2012	Packet Publications
3.	Graphics: Computer Modeling & Animation	John M Blain	Mc Graw Hill Publications.

ASSESSMENT AND CERTIFICATION

S.No	Criteria for assessment
1.	A trainee will be assessed based on the performance in End Examination for Theory and Practical conducted internally in the Project Polytechnic College for a duration of 3 hours
2.	A trainee must have 75% of attendance to appear for End examination in Theory and Practical.
3.	The assessment for theory part will be based on the marks scored in the end examination on the knowledge bank of questions (1 word/objective type questions)
4.	The assessment for practical part will be based on the marks scored in the end examination conducted by the Project Polytechnic and assessed by the Examiners approved by Strategic Plan Implementation Committee (SPIC) of the project polytechnic.
5.	The criteria for successful completion of training is every trainee should score 50% of marks in theory and practical examination.
6.	On successful completion of training , Certificate will be issued to the participants by the Directorate of Technical Education through the Project Polytechnic.

END EXAMINATION

ALLOCATION OF MARKS

S.No	Description	Max.Marks
1.	Theory Examination	20
2.	Practical Examination	
	a)Procedure	10
	b)Execution	30
	c)Output	20
	d)Record	20
	Total Marks	**100**

THEORY MODEL QUESTION PAPER

CSE/2020/023 - MULTIMEDIA AND DRAWING

(Maximum Marks : 20)

(N.B: Answer any **twenty** questions)   **20 x 1 = 20 Marks**

1.   How do you create a new document/canvas

2.   If you don't see your toolbox, what menu item lets you reopen it?

3.   When you draw a shape on a layer, you select it by

4.   The clone tool allows you to.

5.   Which tool is used to resize an image?

6.   Which hotkey is used to create the Gradient colour effect?

7.   Which tool was used to likely to be used to create this image?

8.   What effect is used to change image A to image B?

9.   In Inks cape, what is stroke?

10.   In Inks cape, what's the shortcut to display fill and stroke color options?

11.   How do you add some reflection to your material

12.   What is the keyboard shortcut to delete a Key frame?

13.   What is the shortcut to play animation?

14.   It is used to manipulate individual objects as a unit.

15.   Change between edit and object mode.

16.   What is the use of modification tool?.

17.   list any two snap tools.

18.   How to combine layers in qcad.

19.   What is the use of Qcad?

20.   What is the use of Polar coordinates?

21.   What is the use of Ink precision tool?

22.   Which dockers are used to play animation.

23.   What is the use of Ctrl +E short cut key?

24.   Which short cut key is used to insert a layer.

25.   What is the use of krita software?