# (I

# 2019-2020

# Raja Mansingh Tomar Music & Arts University, Gwalior (M.P)

Scheme (C.F.A) Certificate Course (3D Animation) Regular (One Year Program)

S.No	Section – A Subject Nature Core Courses (Main Subject) THEORY CORE – 1	Subject Code	Total Marks Percentage	Passing Minimum Marks Percentage
1.	History of Animation – Part – I	<b>C1 - CFA -</b> 201	50	17
	PRACTICAL CORE - 2			
2.	Photo Editing / Drawing	C2 - CFA - 202	50	17
3.	3D Animation	<b>C2 - CFA -</b> 203	50	17
	TOTAL		150	

2/5000 04/1/19

# Raja Mansingh Tomar Music & Arts University, Gwalior (C.F.A) Certificate Fine Arts (3D Animation) Theory

History of Animation - Part - I

2019-2020

Subject Code	Total Marks Percentage	Passing Minimum Marks Percentage
C1 - CFA - 201	50	17

## **History of Animation**

Introduction & History of Animation, Modern Age, Principle of Animation.

# Introduction of drawing & Sketching

- Introduction & history, types of drawing
- Free drawing, geometrical drawing, representational drawings, contour drawing, gesture drawing, nature drawing, object drawing.
- Observation of a scene, object & environment
- Line, type of lines, straight, curved, converging, dotted, zigzag, soft and hard lines.
- Definition of colors, classification of colors: primary colors & secondary colors.
- Tone: Light tone, middle tone, dark tone, shadow & Depth
- Texture
- Space
- Introduction to the equipment (tools)

Polygon:- Circle, square, rectangle, triangle, cylinder, Line Drawing, object study, Eve level

- Angle view: Front & Back view, Top & Bottom view, Side view (Right & Left)
- 2D & 3D Drawing

### Drawing from Objects

- Elementary perspective: H.L V.P, 1 point, 2 point, 3 point perspective
- Object Drawing: Drawing form, geometric forms,
- Study from man- made objects
- Projections

### **Human** anatomy

• Study of human forms, general forms and gesture, drawing from cast & figure - light and shades, basic properties, Balance - standing

# Introduction and Importance of Story Boarding

- The art of story boarding
- Story development
- Character designing and development

Script Writing

- ✓ Types of Script
  ••• Camera Angle
- Timing / Spacing
- Dialog Delivery audio and video
- · Ideas of Visual concept

# Image & 2D Editing Software (Basic)

- Introduction & History, Definition, About the Software, Principles of design, role of image in animation, definition of raster graphics, understanding pixel and resolution, file format & operation, Application of Adobe Photoshop in raster graphics design, size of the canvas as per requirement print / 2D Animation
- Basic selection tools, layers, dodge and burn tools, brushes, filters, channel, color correction, color modes, layer mask, raster mask, vector mask, compositions, edit Photoshop, trick photos, mate painting, digital paintings.

#### 3D Animation

History & Introduction, Defination, About the Software, Layout

#### Fields

### Modeling

- o Tools, Shortcuts.
- o Surface Modeling
- ✓ Primitives guruj, cowboy hat, pocket watch,
- ✓ Objective modeling, Background modeling.
- o Polygon Modeling
- ✓ Objective Modeling
- ✓ Background Modeling
- ✓ Organic Modeling

#### • Texturing

o Texturing and Uses of texturing, how to create Texture

o Basic color on object, Lambert, blin, Phong & Phong E, Basic of assign materials, UV unwrapping, UV mapping, Create textures, in Photoshop, assign texture on objects, on B.G. Models, organic & inorganic models.



- About Lighting & Rendering
  Types of Lighting
  Software & Mental ray rendering & lighting
  Physical sun and sky
  Image based lighting

### Animation

- Principle of Animation
  Ball animation
  Walk cycle, walk animation