

# RAJA MANSINGH TOMAR MUSIC & ARTS UNIVERSITY

GWALIOR, MADHYA PRADESH



## Diploma Animation Scheme / Practical / Syllabus

2023 - 2024

## DIPLOMA ONE YEAR (ANIMATION) - SCHEME

Paper	Time (In Hours)	Size	Ext. Marks		Total
			Max. Marks	Min. Marks	
<b>THEORY (SUBJECT)</b>					
<b>1. HISTORY OF ANIMATION (PART – 2)</b>	03		100	33	100
<b>PRACTICAL</b>					
<b>1.PHOTO EDITING / DIGITAL DRAWING (PART - 2)</b>	03	--	100	33	100
<b>2. 3D ANIMATION (PART – 2)</b>	12	--	100	33	100
<b>TOTAL</b>					300

Dr. S. K. Mathew  
H.O.D Applied Arts & Animation  
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Dr. Sonali Jain  
Principal  
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## Diploma One Year (ANIMATION) – PRACTICAL

### 1. PHOTO EDITING / DIGITAL DRAWING (Part - 2)

Study of light & shading, Human anatomy, Study of heads, features and faces, Study of human figures, Study of human anatomy, Clay Modeling, Character Designing & Development (Realistic, Semi – realistic, cartoon), Adobe Editing (Basic to Advance)

### 2. 3D ANIMATION (Part - 2)

**(ADVANCE MODELING)** About the Software, tools, Shortcuts, Surface Modeling, Polygon Modeling

**(ADVANCE TEXTURING)** Texturing and Uses of texturing, basic color, Basic of assign materials, UV unwrapping, UV mapping, Create textures in Photoshop.

**(ADVANCE LIGHTING & RENDERING)** About Lighting & Rendering, Types of Lighting, Software & Mental ray rendering & lighting

**(ADVANCE ANIMATION)** Principle of Animation, Types of Animation

- Work done in the class during the college / University hours shall be accepted for submission.
- Student shall have to submit one sessionals of each subject to the university / college.

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## Diploma One Year (Animation) – THEORY – History of Animation (Part - 2) – Paper – I

### Study of light & shading

Type of light: - Natural Light & Artificial Light, Light & shading of basic solid objects, Color lights, Observing and studying in various rendering media and techniques at various light conditions, Shadow & reflections: - Shading: - light weight even shading, heavy direction, open shading, gradients and techniques, Value scales: - Highlights, light, half tone, shades, cast shades and reflection light, high & low key, lightness and darkness

### Human anatomy

Study of human forms, general forms and gesture, drawing from cast & figure – light and shades, basic properties, Balance – standing still or motion – perspective.

### Study of heads, features and faces

Planes and forms – cube and oval constructions, Study of basics state and human extremities. i.e. eye, ear, nose, mouth, Comparisons, Perspective – the head above eye level, below eye level.

### Study of human figures

Hands and feet, Rhythm and grace – rhythmic forms, symmetry, imaginary inner curve.

### Study of human anatomy

The skeleton – the skull, spinal column, shoulder girdle, pelvic, arms, leg and skeletal proportions

Muscles – muscles of the head, surface forms of the head, neck, arm, leg and further observation on surface forms

### Clay Modeling

Formation of clay, Basic shape & construction

### Character Designing & Development (Realistic, Semi – realistic, cartoon)

Model Sheet, Facial Expression, Balance & Posing, Coloring & Finishing, Set designing & Background designing

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## Introduction and Importance of Story Boarding

The art of story boarding, Story development, Character designing and development, Script Writing, Types of Script, Steps of Script, Screen Play, Camera Angle, Timing / Spacing, Dialog Delivery – audio and video, Ideas of Visual concept.

## Adobe Photoshop (Basic to Advance)

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 / video / 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, Theory of logo design, Scene composition, background designing & development, Character development and designing, Concept art, Photo based art

## 3D Animation (Modeling)

About the Software, tools, Shortcuts, Surface Modeling – Primitives guruj, cowboy hat, pocket watch, Objective modeling - Background modeling, Polygon modeling - Objective Modeling, Background Modeling, Organic Modeling.

## Texturing

Texturing and Uses of texturing, 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.

## Lighting & Rendering

About Lighting & Rendering, Types of Lighting, Describe all types of Light, Ambient Light, Point Light, Area Light, Directional Light, Volume light, Software & Mental ray rendering & lighting, Physical sun and sky, Image based lighting

## Rigging & Animation

IK & FK handle tool, Joint, Skeleton, Principle of Animation, Ball animation, Walk cycle, walk animation, Run and jump animation, Pose to pose animation

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