

I. 2D ANIMATION (CREDITS: 4)

Section-A

*Unit I: **Concept of 2D Animation:*** Introduction, Meaning of Animation, Types of Animation, Principles of Animation, Various steps for creating a 2D Animation, **Drawing Concepts:** Introduction, Documentation, Sketch Book, Different types of Art Forms, Basic drawing categories, Drawing methods, Different types of Drawing, **Basics of color theory:** Introduction, Three dimensions of color, Basic techniques for creating color schemes, Color vision principles, Color Expressions, Color wheel and its purpose, **Incorporating Sound into 2D Animation:** process for digitizing sound, important audio components, sources for audio clips, functions of audio component, considerations when using audio in animation, Synchronizing animation to speech

*Unit II:**Basic of Sketching:*** Introduction, The Pencil, Types of Pencil, Pencil holding techniques, Sketching, Observation, Still life drawing, Composition, Element of Composition, **Drawing:** Types of Drawing Media: Dry Media, Graphite, Charcoal, Pastels, Wet media, Painting: Encaustic, Tempera, Fresco, Oil, Acrylic Paint, Watercolour, Water Colour Techniques, Mixed Media Techniques for Collage, **Exploration of 2D elements,** Design Elements, **Pixel & Resolution:**Introduction, Pixels and Resolution, Resolution, Megapixels, Aspect ratio, True Color, Raster(Bitmap), Vector (Lines/Calculated Points), Types of bitmap images, Characteristics of bitmap data, How to convert bitmap data to vector data and back

*Unit III: **Working with Visual Images:*** Introduction, Design elements, Design principles, Complex shapes, Visual elements of motion graphics, Dot in motion graphics, Line in motion graphics, Surfaces and lighting in motion graphics, Space in motion graphics, **Story Boarding:** Introduction, Different types of shots, long shot, medium shot, closeup, extreme closeup, master shot, depicting camera movement, creating story boarding.

*Unit IV: **Tiles & Credit Making:*** Introduction, Basic design issues, Image resolution, Designing over space, Semantic analysis, Pragmatic analysis, Design structure, Designing over time, Credit Making, Rolling Credit Basics, **Stop motion animation:** Introduction, Character, Set and Props, PowToon Basics, Menu panel, Basic workflow

Section-B

*Unit V: **Painting & Animating Practical:*** Introduction, Ink and Paint, Choosing the right software, Technique for scanning inked drawings, Scanning via GIMP, Edit Scanned Image,

Scale image, Preparing the image, Path tracing, Tracing the image, Numbering, Paint, Paint using GIMP

*Unit VI: **Drawing Concepts***, Understanding background composition, Hardware, Software, Creating the margin, Steps to plan a background, **2D Animation techniques**: Introduction, Hardware, Software, Pencil 2D animation, Colour, Layers, Camera Layer, Add and delete layers, Rename Layer, Resize image, Import in pencil, Animating, **2D Animation for portfolio making**, Portfolio making rules, Steps to make animated short film

*Unit VII: **Digital Layout Creation***: Introduction, GIMP Installation, GIMP-Main Window, GIMP Basics, **Professional Image Editing**: Introduction, Colour Tool, Blur filters, Noise filters, edge detect filters, enhance filters, Generic filters, Glass effects filters, Light effects filters, Distort filters, Artistic filters, Map filters, Rendering filters, Combine filters

*Unit VIII: **Advertising and Illustration***: Introduction, Pixlr editor, Getting started, cropping an image, Resizing an image, Rotating an image, Steps to save an image, Working with layers, Adding text in a new layer, Using layers to make a composite image, Advanced techniques, Using Gaussian Blur to remove the Moire effect, Adjusting hue, saturation, adjusting the levels manually, Using the colour curves to modify an image, Removing a background to create a transparent image, Pixlr express, **Vector Composition and 2D Animation**: Introduction, Getting started, Animation Basics, Understanding the timeline, Adding layers, Animate the stem, adding the petals, Hiding the petals.