(C4) Model Programme Structure for Bachelor of Science (Basic/Hons.) with Practical [B.Sc.(Hospitality Science, Animation & Visual Effects, Counselling, Visual Communication]

Sem.	Discipline Core (DSC) (Credits)	DisciplineElective (DSE) / Open Elective (OE) (Credits)	Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P)		Skill Enhancement Courses (SEC)			Total Credits
					Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)		
I	DSC-1 (3+2) DSC-2 (3+2) DSC-3 (3)	OE-1 (3)	L1-1(3), L2-1(3) (4 hrs. each)		SEC-1: (2) (1+0+2)	Yoga (1) (0+0+2)	Health & Wellness (1) (0+0+2)	26
II	DSC-4 (3+2) DSC -5 (3+2) DSC -6 (3)	OE-2 (3)	L1-2(3), L2-2(3) (4 hrs. each)	Environmental Studies (2)		Sports (1) (0+0+2)	NCC/NSS/R&R(S&G)/ Cultural (1) (0+0+2)	26
			Exit option with Certificate (48 credits)					
III	DSC -7 (3+2) DSC -8 (3+2) DSC -9 (3)	OE-3 (3)	L1-3(3), L2-3(3) (4 hrs each)		SEC-2: SEC (2) (1+0+2)	Sports (1) (0+0+2)	NCC/NSS/R&R(S&G)/Cultural (1) (0+0+2)	26
IV	DSC -10 (3+2) DSC -11 (3+2) DSC -12 (3)	OE-4 (3)	L1-4(3), L2-4(3) (4 hrs each)	Constitution of India (2)		Sports (1) (0+0+2)	NCC/NSS/R&R(S&G)/Cultural (1) (0+0+2)	26
			Exit option with Diploma in a particular Discipline (96 credits)					
V	DSC -13 (3+2) DSC -14 (3+2) DSC -15 (3)	DSC E-1 (3) Vocational-1 (3)			SEC-3: (2) (1+0+2)	Sports (1) (0+0+2)	NCC/NSS/R&R(S&G)/Cultural (1) (0+0+2)	23
VI	DSC-16 (3+2) DSC -17 (3+2) DSC-18 (3)	DSC E-2 (3) Vocational-2 (3) Internship (2)			SEC-4: (2)	Sports (1) (0+0+2)	NCC/NSS/R&R(S&G)/ Cultural (1) (0+0+2)	25
			Exit with Bachelor of Degree in a particular Discipline (140 credits)					
VII	DSC-19(3+2) DSC-20(3+2) DSC-21 (3)	DSC E-3 (3) Vocational-3 (3) Res.methodology (3)						22
VIII	DSC -22 (3) DSC -23 (3) DSC -24 (3)	DSC E-4 (3) Vocational-4 (3) Research Project(6)*						21
			Award of Bachelor of Degree with Honours, B.Sc (Hons.) (180 credits)					

*In lieu of the research Project, two additional elective papers/ Internship may be offered.

Curriculum for BSc. Animation and Visual Effects

Semester 1	DSC	Credits	Paper Title
	DSC-1	3+2	Fundamentals of Drawing
	DSC-2	3+2	Traditional and Stop Motion Animation
	DSC-3	3	History of Animation
	OE 1	3	Basics of Graphic Design
Semester 2	DSC	Credits	Paper Title
	DSC-4	3+2	Storyboard and Advanced Drawing
	DSC-5	3+2	2D Digital Animation
	DSC-6	3	Production Design of Animation
	OE-2	3	Advances in Graphic Design
Semester 3	DSC	Credits	Paper Title
	DSC-7	3+2	3D Modeling
	DSC-8	3+2	Rigging & Animation
	DSC-9	3	CGI Production
	OE -3	3	Photography
Semester 4	DSC	Credits	Paper Title
	DSC- 10	3+2	Dynamics
	DSC-11	3+2	Surfacing & lighting
	DSC-12	3	Aesthetics of Video Editing
	OE-4	3	Editing
Semester 5	DSC	Credits	Paper Title
	DSC-13	3+2	Video Compositing
	DSC-14	3+2	Audio Production
	DSC-15	3	Digital Compositing
	DSC E -1	3	Ad Film Making
	Vocational-1	3	Advanced CGI I
Semester 6	DSC	Credits	Paper Title
	DSC-16	3+2	Project Management
	DSC-17	3+2	Advanced Video Compositing
	DSC-18	3	Advanced Animation
	DSC E -2	3	Stereoscopic & Match Moving
	Vocational -2	3	Advanced CGI II
	Internship	2	Report/ Dissertation
Semester 7	DSC	Credits	Paper Title
	DSC-19	3+2	Advanced Modeling
	DSC-20	3+2	Advanced Lighting and Rendering
	DSC-21	3	Introduction to Electronic Media
	DSC E -3	3	Film Production management
	Vocational -3	3	Digital Cinematography
	Research Methodology	3	
Semester 8	DSC	Credits	Paper Title
	DSC-22	3	Creative Business Management
	DSC-23	3	Media Ethics and copyright law
	DSC-24	3	Visual Communication
	DSC E -4	3	Case study on animation film production.
	Vocational -4	3	Animation Promotion & Merchandising
	Research Project	6	

Curriculum Structure

Program: B.Sc. (Basic and Honors)   Subject: Animation & Visual Effects

Sem	Discipline Specific Core Courses(DSC)	Hours/Week		Discipline Specific Elective Courses (DSE)/ Vocational Courses (VC)	Hours/ Week
		Theory	Lab		
1	DSC-1: Fundamentals of Art DSC-1 Lab: Principles of Art, Colour Theory Figure Drawing and Perspective Drawing	3	4		
1	DSC-2: Traditional and Stop Motion Animation DSC-2 Lab: Animation Principles, Cel Animation, Clay Sculpting, Stop Motion animation	3	4		
1	DSC-3: History of Animation	3			
1	OE-1: Basics of Graphic Design	3			
Sem					
2	DSC-4: Storyboard and Advanced Drawing DSC-4: Lab: Layout, Storyboard, Comic strip, Gesture Drawing, Figure drawing, Cartoon Character	3	4		
2	DSC-5: 2D Digital Animation DSC-5: Lab: Key Frames, X-Sheet, Walk cycle, Run Cycle, Jump, Expressions, Logo Animation.	3	4		
2	DSC-6: Production and Design of Animation	3			
2	OE-2: Advances in graphic design (vector)	3			

First Semester

Course Code: DSC-1	Paper Title: Fundamentals of Art
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Points and lines- Types, Direction, Quality, lines and outlines, contours, Lines as value, Shapes, Geometric and Rectilinear, Curvilinear and Biomorphic, Abstract, Positive and negative, Distortion and idealism, Texture- Tactile, Collage, Visuals.	10
Unit - 2	
Space- illusion of depth, Shallow and deep, Size cues, Linear Perspective, Types of Perspective, object drawing, Open and close compositions, Spatial confusion, Time and Motion- Anticipated motion, Repeated figures, Multiple images, Motion Blur, Value- Introduction, Patterns, light and shade, digital shading and lighting.	10
Unit - 3	
Color- Characteristics, Color theory- wheels, triangles and trees, color through ages, color interactions, Unity and Harmony- Thematic unity, Gestalt and visual unity, Achieving unity, Balance- Formal and Informal balance, Balance by position and eye direction, Crystallographic Balance	10
Unit - 4	
Scale and Proportion- Human scale, Contrast and Confusion, Ideal Proportion, Contrast and emphasis- Contrast, Isolation, Placement, Absence of Focal point, Rhythm- Rhythm and motion, Alternating and Progressive Rhythm, Rhythmic Sensation.	09

Reference Books:

1. Alan Pipes, Foundation of Art and Design, Thames & Hudson; 2nd Revised edition ,2008
2. Poppy Evans and Mark A Thomas, Exploring the Elements of Design, 2007
3. Gail Greet Hannah, Elements of design: Rowena reed Kostellow and the structure of visual relationships, Princeton
   Architectural Press, 2002
4. Theo Mandel, The elements of User interface design, 1997
5. Kenneth W. Auvil, Perspective drawing (Paperback), 1996

Course Code: DSC-1 Lab	Paper Title: Fundamentals of Art Lab
Course Credits: 2	Hours of Teaching/Week: 4
Total Contact Hours: 52	Formative Assessment Marks: 25
Exam Marks: 25	Exam Duration: 3 Hours

Practice Lab

The following activities shall be carried out as a part of practical classes:
1. Application of Principles of Art
2. Use of Lines and Shapes
3. Usage of Color and Value
4. Usage of Texture on 3D objects
5. Creating Background with pencil shading
6. Usage of Scale in Composition
7. Applying color Mixing
8. Use of Geometry, measurement and proportion
9. Freehand Object Drawing
10. Use of drawing in painting
11. Application of Figure drawing
12. Application of action poses in drawing
13. Application of One point perspective interior
14. Application of One point perspective exterior
15. Application of Two point perspective interior
16. Application of Two point perspective Exterior
17. Application of Three point perspective low angle
18. Application of Three point perspective high angle

Reference Books:

1. Alan Pipes, Foundation of Art and Design, Thames & Hudson; 2nd Revised edition ,2008
2. Poppy Evans and Mark A Thomas, Exploring the Elements of Design, 2007
3. Gail Greet Hannah, Elements of design: Rowena reed Kostellow and the structure of visual relationships, Princeton Architectural Press, 2002
4. Theo Mandel, The elements of User interface design, 1997

Course Code: DSC-2	Paper Title: Traditional and Stop Motion Animation
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Cell Animation, Process of cell/ Traditional animation- Story and script Development, Storyboarding, animatics, voice over, character design, Model sheet, layout and its styles, color sheet. Character development, Model and style sheet, Lip synchronization and facial expression chart.	10
Unit - 2	
Animation: Rough sketches, pencil test, clean up, key frame and in-between animation, animation timing, using exposure sheets, scanning, inking and painting. Ball bounce animation, pendulum animation, treadmill walk cycle, treadmill run cycle.	10
Unit - 3	
Introduction to stop motion animation, Types of stop motion animation- sand animation and its techniques, clay animation and its techniques, Cut out animation and its techniques, Object animation and its techniques.	10
Unit - 4	
Pixilation and its techniques, paint on glass animation and its techniques, Puppet/Muppet animation and its techniques, Time lapse animation and its techniques, Kinestasis and collage: the process and techniques.	09

Reference books:

1. Mary Murphy, Beginner's guide to animation: Everything you need to know to get started, Watson-Guptill, 2008.
2. Mark Spess, Mike Brent, And Lionel Orozco, Secrets of clay animation revealed, CreateSpace Independent Publishing Platform; Updated edition, 2000
3. Susannah Shaw, Stop Motion: Craft Skills for Model Animation, Second Edition (Focal Press Visual Effects and
    Animation) 2nd Edition, 2008
4. Barry J C Purves, Stop Motion Passion, process and performance, Focal Press; 1 edition, 2007 Adobe creative
    team, Adobe premiere CS6 classroom in a book, Adobe, 2012.

Course Code: DSC-2 Lab	Paper Title: Traditional and Stop motion Animation Lab
Course Credits: 2	Hours of Teaching/Week: 4
Total Contact Hours: 52	Formative Assessment Marks: 25
Exam Marks: 25	Exam Duration: 3 Hours

Practice Lab

The following activities shall be carried out as a part of practical classes:

I. Traditional Animation

1. Usage of Light Box and Peg bar
2. Exploring Basic Principles of Animation
3. Application of keys, breakdowns, and in-betweens, to make fluid action
4. Explore Squash and Stretch in Ball Bounce
5. Application of ease-in and ease-out on pendulum animation
6. Anticipation and settle, the wave principle, and overlapping action on Tail wag animation
7. Application of inking and painting
8. Creating Model sheets
9. Character Development
10. Treadmill walk cycle

II. Stop Motion Animation

1. Application of Modeling with clay
2. Application of clay sculpting
3. Creation of props and sets
4. Applications of lights for the sets
5. Working with camera for the shoot
6. Applying camera for frame to frame shoot
7. Use of color scheme for characters and sets
8. Application of cut out character creation
9. Animation using cut out character
10. Use of software for compositing the frames
11. Application of timing adjustment with frame rate in software
12. Use of Monkey jam for capturing.
13. Application of Kinestasis stop motion animation.

Reference Books:

1. The Animator's Survival Kit – Richard Williams
2. Producing Independent 2D Character Animation- Mark Simon
3. Stop Motion: Craft Skills for Model Animation – Susannah Shaw
4. Stop-motion Animation: Frame by Frame Film-making with Puppets and Models – Barry Purves

Course Code: DSC-3	Paper Title: History of Animation
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Animation: Most common uses of animation: Cartoons, simulations, scientific visualization, analysis, understanding, teaching. The Past: Cave Paintings, Egyptian murals, the magic lanterns, flipbooks, History of animation: Victorian parlor toys, Techniques of animation, other animation styles, Analyzing Animated Cartoons and their Evolution: History, Silent era, Feature films, Commercial animation.	10
Unit - 2	
Editorial cartoons: History and origin, Computer animation: Its history and animation methods, Computer animation in Film and TV, Limited animation: History and techniques, Motion capture: Advantages and disadvantages, Introduction to Multimedia and Animation, Introduction to Computer graphics and animation.	10
Unit - 3	
Different types of animation: 2Danimation, 3D animation, The Process of 2D animation, The process of 3D animation, History of 2D and 3D animation films,	10
Unit - 4	
Studies on the films of: Walt Disney, MGM cartoon studios, Warner Bros Studios, Pixar Studio, Studio Ghibli.	09

Reference Books:

1. Dr. Jiang Tan, Aspects of animation, steps to learn animated cartoon, Serials Publications Pvt. Ltd, 2016
2. Richard Williams, Animation Survival Kit revised edition, Faber; Main - Revised edition 2009
3. Kit Laybourne and John Canemaker, The Animation book: A complete guide to animated film making, Three Rivers Press, 1998
4. Charles Solomon, Enchanted Drawings: The history of animation,1994
5. Bob Thomas, The Art of Aanimation,1958

Course Code: OE-1	Paper Title: Basics of graphic design (Raster, Photoshop)
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Introduction to Raster: Pixels, Bitmap graphics, Formation of Image, File Size of raster Image. Resolution, Image Pixelation, Colour, position and transparency of Pixel. Colour Channels, Manipulating Pixels. Compressed or Uncompressed File types. File Extensions. Advantages and Disadvantages of Raster Graphics.	10
Unit - 2	
Introduction to Photoshop: History of Photoshop, Versatility, Digital Imagery, manipulating or creating raster based images. Workspace. Menu Bar, Option Bar, Tool Bar, Windows, New document presets, Importing and Exporting files. Photoshop Essential file formats. Actions and Actions Panel. Animation and Timeline. Painting Modes, Plugins.	10
Unit - 3	
Layers, smart objects, Blend modes, Selection Tools, Filters, Foreground & background, Changing Foreground and Background colours, Color selection Boxes and Colour swathes, Eyedropper tool, Painting Tool. Brushes: Methods and applications.	10
Unit - 4	
Perspective art, Traditional designs, 2D Character Designing, Photo Collage, Matte Painting, Digital painting, Basics of 2D Animation, Gif Animation.3D extrusion.	09

Reference Books:

1. Scott Petrovic - Digital Painting with KRITA 2.9: Learn All of the Tools to Create Your Next Masterpiece, 2015
2. Andrew Faulkner and Conrad Chavez - Adobe Photoshop CC Classroom in a Book, 2018 Release by Pearson, 2018
3. Adobe Photoshop Classroom In A Book (2020), The official guide to Adobe Photoshop, From Adobe press,

Second Semester

Course Code: DSC- 4	Paper Title: Storyboard and Advanced Drawing
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
History of Indian traditional art form, history of western contemporary art, understanding human forms with stick figures, mannequin drawings, gesture drawings- static and working figures, perspective figure drawing, Male, female and child anatomy. Understanding animal and bird anatomy. Designing creatures, Head proportions: 7 1/2, 8 and 9 head character creation.	10
Unit - 2	
Layout design, understanding perspective drawing in layout creation, understanding plant, shrubs and trees for layout, staging and composition, contrast and mood, architecture- cityscape, proportion and volume, understanding the concepts of lighting and shading.	10
Unit - 3	
Introduction to Storyboard, Types of Storyboard, Storyboard in Pre- Production, Benefits of Production, Artist and the Storyboard, Components and Principles of Storyboard, Drawing Thumbnail Storyboard, Sketching Perspective, Adding reality with Perspective, Final Storyboard art and theme, Storyboard Coloring.	10
Unit - 4	
Action in Storyboard, Light Sources and Depth of Field, The Shot and its function in Storyboard, Animatics, Presentation Board vs. Production Boards, Live Action boards, Animation board, Comps, Previz Styles. Directing Shots, Working with directors, Screen direction, Illustrated camera techniques, Numbering, Contrast and Mood, Special Effects, Conceptual illustration.	09

Reference Books:

1. John hart, The Art of the Storyboard: A Filmmaker's Introduction, Second Edition, Focal Press; 2007.
2. Mark Simon, Storyboards: Motion in Art, Third Edition Focal Press, 2006.
3. Mark T Byrne, The Art of Layout and Storyboard, 1999
4. Jean Ann Wright, Animation Writing and Development: From Script Development to Pitch,2005.
5. Nancy Beiman, Prepare to Board! Creating Story and Characters for Animated Features and Shorts, Focal press, 2013.

Course Code: DSC- 4 Lab	Paper Title: Storyboard and Advanced Drawing Lab
Course Credits: 2	Hours of Teaching/Week: 4
Total Contact Hours: 52	Formative Assessment Marks: 25
Exam Marks: 25	Exam Duration: 3 Hours

Practice Lab

The following activities shall be carried out as a part of practical classes:

I.   Storyboard
1. Aspect ratio in panel for storyboard
2. Application of Camera Shot and Camera angle
3. Layout for storyboard
4. Creating comic strips

II.   Advanced Drawing Lab
1   Gesture drawings
2   Line of action
3   Life sketching
4   Outdoor studies for sketching
5   Static poses
6   Action poses
7   Using strokes and shading techniques
8   Constructions of cartoon face
9   Construction of human face
10 Construction of cartoon character
11 Construction of Female anatomy
12 Construction of male anatomy
13 Creating model sheet of character
14 Creating Layout

*Note: Practical is related to the concepts covered in Theory Story Boarding.

Reference Books:

1. Tom bancoft, Glen Keeane, Creating characters with personality: For Film, TV, Animation, Video games   and graphic novels, Watson-Guptill; 1st edition, 2006.
2. Robert Hale, Terence coyle, Robert Beverly hale, Anatomy Lessons from the Great Masters, Watson   Guptill; Reprint edition, 2000.
3. Dr. Paul Richer, Artistic Anatomy: The Great French Classic on Artistic Anatomy, Watson-Guptill; Reprint, Anniversary edition, 1986.
4. John hart, The Art of the Storyboard: A Filmmaker's Introduction, Second Edition, Focal Press, 2007.
5. Mark T Byrne, The Art of Layout and Storyboard, 1999.

Course Code: DSC-5	Paper Title: 2D Digital Animation
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Introduction to Digital Animation: Overview of 2D Traditional animation, 2D Vector based animation, Digital ink and Paint, Style and process, Resolution independence, Quality constraints, Scalability and ease of distribution, Advantages and disadvantages.	10
Unit - 2	
Introduction to Animate CC: Basics of Animate CC workspace, Working with elements, Adding motion, Creating Graphics and Importing Art, Designing Animation, Refining Animation & Adding Complexity, Adding Basic Interactivity, Embedding Media and Advanced Interactivity, Publishing and Responsive Design.	10
Unit - 3	
Principles of Animation, Key Frames, In-betweens, Timing and spacing, Usage of Code design, for the in-between, Application of X Sheet, Application of adding up extra details and poses, Application of Timing through in-betweens, Application Pencil test for animation check, Editing of Animation, after pencil test, Scanning at right resolution, Importing scanned images into the software through layers, Checking timing in software to achieve smooth animation, Application of clean up for smooth lines and Flow. Applying consistency though adding missing detail, Working on details with line Strokes for smooth flow, Cross checking gaps between the lines in clean ups.	10
Unit - 4	
Motion Media, Logo Animation, Cycles, Bouncing Ball, Pendulum, Flag Wave/Fabrics, Using Anticipation, Exaggeration and Balance to show Weight, Breaking a character down into basic shapes for animation, Creating a Boil, Staggered frames to imply coughing, laughing, shaking, Takes, Head Turn, Walk Cycle, Run Cycle, Dialogue/Changing Expressions, Quadruped Walk, Puppet Animation: Creating and Animating Symbols, Creating a Simple Puppet, Creating a Character Puppet, Testing your Puppet with a Walk Cycle, Nesting Graphics and Creating interchangeable Parts. Importing Sounds and Animating.	10

Reference Books:

1. Richard Williams, Animation Survival Kit revised edition, Faber; Main - Revised edition, ACM Digital press, 2009
2. Sergi Camara, All About Techniques in Drawing for Animation Production, B.E.S. Publishing, 2006.

Course Code: DSC- 5 Lab	Paper Title: 2D Digital Animation Lab
Course Credits: 2	Hours of Teaching/Week: 4
Total Contact Hours: 52	Formative Assessment Marks: 25
Exam Marks: 25	Exam Duration: 3 Hours

The following activities shall be carried out as a part of practical classes:

1. Use of Key Frames in animation.
2. Achieving flow with the use of In-betweens.
3. Usage of Code design for the in-between.
4. Application of X-Sheet.
5. Application of adding up extra details and poses.
6. Application of Timing through in-betweens.
7. Application Pencil test for animation check.
8. Editing of Animation after pencil test.
9. Scanning at right resolution.
10. Importing scanned images into the software through layers.
11. Checking timing in software to achieve smooth animation.
12. Application of clean up for smooth lines and flow.
13. Applying consistency though adding missing detail.
14. Working on details with line Strokes for smooth flow.
15. Cross checking gaps between the lines in clean ups.
16. Digital ink and Paint.
17. Digital Background- Cityscape, Landscape, Interior.
18. Ball Bounce.
19. Walk and run Cycle.
20. Jump Animation.
21. Logo Animation.
22. Facial Expression.

Reference Books:

1. Richard Williams, Animation Survival Kit revised edition, Faber; Main - Revised edition, ACM
2. **Make Your Own Pixel Art: by Jennifer Dawe and Matthew Humphries.**
3. Sergi Camara, All About Techniques in Drawing for Animation Production, B.E.S. Publishing, 2006.

Course Code: DSC-6	Paper Title: Production Design of Animation
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Animation, Principles of Animation: Squash and stretch, anticipation, staging, straight ahead and pose to pose, follow through and overlapping action, slow in and slow out, arc, secondary action, timing, exaggeration, solid drawing, appeal.	10
Unit - 2	
Pre-production process: Idea- finding idea, photos and drawings, research, evaluating your ideas. Story: differences in story structure, creating a story, story theme, premise and outline. Storyboard: storyboard for writers and television story editor. Animatics, Design and art direction, Story reels, Animation timing, X sheet, Title, Voice recording: session preparation, rehearsal.	10
Unit - 3	
Character development: Model sheet. Composition and drawing. Traditional 2D production-workbook, editorial, Layout, animation, scene planning and scanning, Scene planning checklist, blue sketch and clean up layout, clean up animation, visual effects, BG painting, animation checking, Ink and paint, final checking, compositing/ film output.	10
Unit - 4	
Comic books: History and evolution, genres and categories, Script for comics, create your own comic. Traditional animation, Digital animation, CGI animation, CGI animated humans, Live Action, 2D animation: Light boards, Peg bars, keyframes, in-betweens, ine strokes for of animation.	09

Reference Books:

1. Jean Ann Wright, Animation Writing and Development: From Script Development to Pitch,2005
2. Christy Marx , Writing for animation, comics and games, 2006
3. Catherine Winder and Zahra Dowlatabadi, Producing animation, Routledge; 2nd edition, 2011.
4. Richard Williams, Animation Survival Kit revised edition, Faber; Main - Revised edition 2009
   Preston Blair, Cartoon animation, Walter Foster Publishing, 1994.

Course Code: OE-2	Paper Title: Advances in Graphic Design (Vector)
Course Credits: 3	Hours of Teaching/Week: 3
Total Contact Hours: 39	Formative Assessment Marks: 40
Exam Marks: 60	Exam Duration: 2 Hours

Course Content

Content	Hours
Unit - 1	
Introduction to Vector Graphics: Properties of Vector graphics, Images comprise, Geometric Shapes, Line and Colour, Size and position, Recording properties, Scalable vector graphics, Objects, Clip art, Advantages and disadvantages of vector graphics. Vector Graphics Colour Schemes, Adobe Kuler.	10
Unit - 2	
Introduction to Adobe illustrator: Workspace of illustrator, selecting and aligning, creating and editing shapes, transforming objects, drawing with pen and pencil tools, color and painting, working with type, working with layers, working with perspective drawing, blending colors and shapes, working with brushes, applying effects, applying appearance attributes and graphic styles, working with symbols, Vector Graphics, 3D Modeling Wireframe modeling, Combining illustrator with other adobe applications.	10
Unit - 3	
Introduction to InDesign: History of InDesign, Evolution of DTP Software. Electronic and Virtual pages. Application Bar, Control Panel, Document Layout, Tool bar, Panels Bar. Ruler measurements. Setting number of pages and page size. Setting the margins, Bleed and slug. Saving a document preset. Page panel. Master page. Creating Page number. Creating text frames. Importing and exporting files.	10
Unit - 4	
Graphic design, graphic designer, group structure and working methods, Art or Craft, Industrialization, technology, typography, Consumerism, Identity and branding, social responsibility, Modernism and post modernism, nostalgia and rhetoric, semiotics, vernacular.	09

Reference Books:

1. Gavin Ambrose and Paul Harris, Fundamentals of Graphic designing, AVA Publishing, 2008
2. Nick Rawlinson, Ultimate guide to graphic design, Dennis Publishing; 2nd edition, 2010.
3. Leonard Koren and R. Wippo Meckler, Graphic design cookbook, Chronicle Books; 1st Edition, 2001.
4. Gary David Bouton, Corel draw X5- the official guide, Correl press, 2011
5. Adobe creative team, Adobe Illustrator CS5 classroom in a book, Adobe Pr. 2010.

Scheme of Assessment for Theory Examination

Question Pattern		Marks
Part – A		
1. Answer any **SIX** sub-questions (6×2=12)		
Sub-question	Unit	12
a, b	1	
c, d	2	
e, f	3	
g, h	4	
Part – B (Answer any **ONE** full question from each unit, 12 marks each) (Combinations of sub-questions of 3 to 6 marks)		
Unit-1		12
2.		
3.		
Unit-2		12
4.		
5.		
Unit-3		12
6.		
7.		
Unit-4		12
8.		
9.		
Total		**60**