Learning Outcomes-based Curriculum Framework (LOCF)

for

B.Sc. (Graphics & Animation)

A Four-Year Undergraduate Programme

under

New Education Policy (NEP)/Learning Outcomes-based Curriculum Framework (LOCF)

w.e.f. Academic Session 2020-21. Eligibility: 10+2 in any discipline



Institute of Mass Communication & Media Technology Kurukshetra University, Kurukshetra

Proposed Scheme for New Education Policy in B.Sc. Graphics & Animation Programme

Semester	CORE COURSE (CC) @ 6 Credits	Ability Enhancement Compulsory Course (AECC) @ 2 Credits	Skill Enhancement Course (SEC) @ 2 Credits	Discipline Specific Elective DSE @ 6 Credits
I	CC- 1A CC- 2A CC- 3A	(English/MIL Communication)/Environ mental Studies		
II	CC- 1B CC- 2B CC- 3B	(English/MIL Communication) / Environmental Studies, Hindi		
III	CC- 9 CC- 10 CC- 11 CC- 12		SEC-1	
IV	CC- 13 CC- 14 CC- 15 CC- 16		SEC -2	
V			SEC -3/MOOC*	DSE-1 (Elective Subject)
				DSE-2 (Elective Subject) DSE-3 (Elective Subject)
	Internship/Industr	v Training **		(Elective Subject)
VI	•		SEC-4	DSE-4 (Elective Subject)
				DSE-5 (Elective Subject) DSE-6 (Elective Subject)
				(Elective Subject)

AECC will be offered according to the time table adjustments in the Institute/Department.

**Internship/Industry Training A candidate must complete industry training of 4 to 6weeks after completion of theory examination of 4th semester. The internship report will be submitted in 5th semester.

General instructions:

- One credit equivalent to 1 hour of teaching/2 hours of Practical work
- Teaching workload will be calculated on the basis of teaching contact hours of the course
- One credit (theory /Practical) equivalent to 25 marks

^{*}MOOC Course from Swayam Portal.

^{**} SEC can be offered in 3rd/4th/5th semester according to the time table adjustments in the institute.

Total No. of Courses, Credit and Marks

Course	No. of Courses	Credits Teaching/Week	Credits Practical/ Week	Credits Tutorials/Week	Total Credits	Marks
Core Courses	16	2x5=10 14x4=56 Total=66	14x2=28	2x1=2	10+56+28 +2=96	16x150 =2400
AECC	3	3x2=6			6	3x50 =150
SEC	4	4x2=8			8	4x50 =200
DSE	6	6x4=24	6x2=12		24+12=36	6x150 =900
Industrial Training					2	1x50 =50
Total	29	104	40	2	148	3700

Scheme of Examination of B.Sc. (Graphics & Animation) programme in accordance with NEP 2020 (Multiple Entry-Exit, Internships and Choice Based Credit System) w.e.f. Academic Session2022-23 in phased manner

Semester-I

Code	Course Title	Course	Cor We		Hou	rs per	Credits	Total Credits		M	arks		Duration of Exam
Code		Type	L	r T	P	Total		Credits	T	P	IA	Total	oi Exam
AECC- N100	Communicative English	AECC-1	2	-	-	2	2	2	25	-	25	50	2 Hours
B-GAG- N 101	Graphic Communication	CC-1A	5	1	-	6	6	6	75	-	75	150	6 Hours
B-GAG- N102	Fundamental of Animation	CC-2A	5	1	-	6	6	6	75	-	75	150	6 Hours
B-GAG- N103	Digital Art & Sketching (Theory)	CC 2A	4	-	-	4	4		50	-	50	100	3 Hours
B-GAG- N104	Digital Art & Sketching (Practical)	CC-3A	-	-	2	4	2	6	-	25	25	50	3 Hours
B- GAG -N105	Computer Science(Theory)	SEC-1	1	-	-	1	1	2	20	-	5	25	2 Hours
B- GAG -N106	Computer Science(Practical)	SEC-1	-	-	1	2	1	2	-	20	5	25	2 Hours
B- GAG -N107	Activity/Hobby Gita-A Manual of Life (Option-i) Public Speaking (Option-ii)							2	Satisfactory/Non satisfactory				
	· · · · · · · · · · · · · · · · · · ·	•	•			Tota	l Credits	24	Tot	al Ma	rks	550	

Semester-II

Course	Course Title	Course	Cor	tact		s per	Credits	Total		М	arks		Duration
Code	Course Title	Type	We		IIoui	в рег	Creares	Credits		111	ui II		of Exam
0 0 0 0 0		-J F	L	Т	P	Total		0 2 0 0 2 0 0 2 0 0	T	P	IA	Total	
AECC- N200	Environmental Studies	AECC-2	2	-	-	2	2	2	25	-	25	50	2 Hours
B-HIN- N200	Communicative Hindi	AECC-3	2	-	-	2	2	2	25	-	25	50	2 Hours
B-GAG -N201	Digital Design & Raster Graphics (Theory)	CC 1D	4	-	-	4	4	6	50	-	50	100	3 Hours
B-GAG -N202	Digital Design & Raster Graphics (Practical)	CC-1B	-	-	2	4	2		-	25	25	50	3 Hours
B-GAG -N203	Animation Techniques (Theory)	CC 2P	4	-	-	4	4	6	50	-	50	100	3 Hours
B-GAG -N204	Animation Techniques (Practical)	CC-2B	-	-	2	4	2		ı	25	25	50	3 Hours
B-GAG -N205	Comic Design & Character Anatomy (Theory)	CC-3B	4	-	-	4	4	6	50	-	50	100	3 Hours
B-GAG -N206	Comic Design & Character Anatomy (Practical)		-	-	2	4	2		ı	25	25	50	3 Hours
B-GAG -N207	Human values and Ethics	SEC-2	2	-	-	2	2	2	25	-	25	50	2 Hours
B-GAG -N208													
		Total Cred	its					26	Tota	al Ma	rks	600	

List of Total Subjects in B.Sc. Graphics & Animation:

Sr.	Course Type	Number of
No.		Subjects
1	CC	16
2	AECC	03
3	SEC	04
4	DSE	06
	Total	29

	Course Type	Number of
Semester I		Subjects
	CC	3
	AECC	1
Semester II	CC	3
	AECC	2
Semester III	CC	4
	SEC	1
Semester IV	CC	4
	SEC	1
Semester V	SEC	1
	DSE	3
Semester VI	SEC	1
	DSE	3
Total		29

List of Abbreviations

L - Lecture

T- Tutorial

P- Practical

IA – Internal Assessment

CC- Core Course

AECC- Ability Enhancement Compulsory Course

SEC- Skill Enhancement Course

DSE- Discipline Specific Elective

PROGRAMME OUTCOMES

On successful completion of the programme, the student will be able to:-

- **PO1** Acquire knowledge related to the discipline under study.
- **PO2** Communicate and reflect effectively and efficiently on the issues related to the discipline.
- **PO3** Exhibit the professional skills and competencies acquired during the Programme of study.
- **PO4** Apply the knowledge and skills acquired in planning, organizing, evaluation and decision making.
- **PO5** Explore, analyze and provide solutions to the problems related to the discipline and life.
- **PO6** Develop exposure to actual working environment leading to employability and entrepreneurship.
- **PO7** Exhibit scientific & research capabilities in academic, professional and general life pursuits.
- **PO8** Recognize, appreciate and follow ethical issues relating to the discipline and society.

Programme Specific Outcomes:

After completion of under graduate programme in Graphics & Animation, the learner will be able to:

- **PSO1** Acquire knowledge about graphics and animation as visual communication tool.
- **PSO2** Develop competencies and skills needed for becoming an effective graphic designer and animation artist.
- **PSO3** Develop competency for employability and entrepreneurship by practicing various designing and animation applications.
- **PSO4** Understand the significance of good design to build the brand identity.
- **PSO5** Demonstrate critical & aesthetical skills through design, animation and visual effects projects.

AECC-N100: Communicative English

Time: 2 Hrs. Total Marks: 50 Credits: 2 Theory:25

Internal Assessment: 25

Contact hours per week: 2

Course objectives: The paper is designed to enhance proficiency in English Language. It seeks to develop the basics of English Language through different modules. Each unit will enable and capacitate the learner to have communication competence which is required in the present-day world. The basic knowledge of communication will enable the learners to share and enliven ideas, experience and know-how ubiquitous in the world.

Course Learning Outcomes:
After completing the Course, the student will be able to:
AECC-N100.1:Learn the rhetoric of presentation
AECC-N100.2 : Learn, comment and respond to correspondence
AECC-N100.3 : Learn the basics of grammar and composition
AECC-N100.4 : Acquaint with verbal and non-verbal communication

Note: All questions are compulsory.

- Q.1. The paper setter will set two question from unit-II. The student shall attempt one out of the given two. (05)
- Q.2. This question shall be based on unit-III. The student shall attempt one out of the given two. (10)
- Q.3. There will be 15 grammatical items based on unit-IV. The student shall attempt any 10 items. (10)

Internal Assessment: The students shall be required to make presentation /PPT based on unit-I.

Unit-I

Listening and speaking skills

Listening skills (Active-passive, Accent)

Speaking Skills (Accent, Stress, Intonation, Assertion, Rhetorical questions, Pause, Pitch)

Oral presentation, Debates, Elocution and Extempore

Unit-II

Writing skills

Report writing

Paragraph writing

Letter writing

Unit-III

Technical and Modern communication

Resume writing

E-mail

Blogs and comments on social media

Unit-IV

Grammar

Noun, Pronoun, Verb, Adverb, Adjective, Preposition, Conjunction and their uses

Common errors in the use of English (Noun, Pronoun, Adjective, Adverb, Conjunctions)

Correct use of verbs and Articles

Vocabulary: Homonyms, Homophones, Pair of words

References:

- o Communicative English, Dr. Jimmy Sharma, ArihantParkashan Pvt. Ltd.
- o Strengthen Your English, Bhaskaran and Horsburgh, Oxford University Press
- Basic Communication Skills for Technology, and area J Rutherfoord, Pearson Education Asia.
- o Murphy's English Grammar with CD, Murphy, Cambridge University Press
- o English Skills for Technical Students by Orient Longman
- Everyday Dialogues in English by Robert J. Dixson, Prentice-Hall of India Ltd.,
 2006.

AECC-N100: Communicative English

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
AECC-N100.1	2	2	2	2	2	2	2	2
AECC-N100.2	2	2	2	2	2	2	2	2
AECC-N100.3	2	2	2	2	2	2	2	2
AECC-N 100.4	2	2	2	2	2	2	2	2
Average	2	2	2	2	2	2	2	2

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
AECC-N100.1	2	2	2	2	2
AECC-N100.2	2	2	2	2	2
AECC-N100.3	2	2	2	2	2
AECC-N100.4	2	2	2	2	2
Average	2	2	2	2	2

СО	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
AECC-N100.1	2	2	2	2	2	2	2	2	2	2	2	2	2
AECC-N100.2	2	2	2	2	2	2	2	2	2	2	2	2	2
AECC-N100.3	2	2	2	2	2	2	2	2	2	2	2	2	2
AECC-N100.4	2	2	2	2	2	2	2	2	2	2	2	2	2
Average	2	2	2	2	2	2	2	2	2	2	2	2	2

B-GAG-N101: Graphic Communication

Time:3 Hrs. Total Marks: 150 Credits: 6 Theory: 75

Internal Assessment: 75

Course Objectives: The academic work in the Semester aims at an understanding of the basic elements of compositions that merge to form the language of visual communication.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N101.1: Become aware of the principles and elements of aesthetic including Indian concept.

B-GAG-N101.2: Understand the grammar of visual narratives.

B-GAG-N101.3: Gain the ability to compose visuals and visual narratives

B-GAG-N101.4: Develop creative problem-solving skills used in communicating visually as an artist.

Note: - The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

Unit-I

Introduction:

Communication: Concept, Process and significance Communication Types: Verbal and Non-Verbal Graphic Communication: Meaning and Definition Design Theory: Gestalt Principal, Visual Perception

AIDA Model

Unit II

Basics of Art:

Meaning and Definition of Art

Elements of Art: Point, Line, Form, Shape, Space, Colour, Texture, Value,

Principles of Art: Balance, Rhythm, Harmony, Contrast, Proportion,

Dominance, Unity

Process of Designing and A-B Testing

Unit –III

Art Aesthetics:

Aesthetics of Art: Origin of Aesthetics

Meaning and definition of Aesthetics, importance of Aesthetics in arts and animation Indian concept of Aesthetics and theory of Ras, Bhava, Shadaang, Auchitya,

Alankaar, Rasa Nispatti

Unit IV

Compositional Theories:

Golden Rules: Rule of Third, Golden Section, Golden Triangles, Spiral Section,

Diagonal, Radial,

Perspective: One Point, Two Point and Three Point

Positive & Negative space

References:

- Golombisky, K., & Hagen, R. (2017). White space is not your enemy: A beginner's guide to communicating visually through graphic, web & multimedia design. CRC Press.
- Smith, K. (2005). Handbook of visual communication: Theory, methods, and media.
- Lester, E (2000) Visual Communications: Images with Messages. Thomson
 Learning
- Schildgen, T (1998). Pocket Guide to color with digital applications. Thomsom
 Learning
- Picture this: Media Representation of Visual Arts and artists. University of Luton Press
- o Palmer, Frederic: Visual Elements of Art and Design, 1989, Longman
- o Porter, Tom and Goodman, Sue: Manual of Graphic Technique 2: For Architects,
- o Graphic Designers, and Artists, 1982, Astragal Books. London
- o Palmer. F: Visual Awareness (Batsford, 1972)

B-GAG N101: Graphic Communication (Theory)

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N101.1	3	3	3	3	3	3	3	3
B-GAG-N101.2	2	3	3	2	3	3	3	3
B-GAG-N101.3	3	3	3	3	3	3	3	3
B-GAG-N101.4	3	3	3	3	2	3	3	3
Average	3	3	3	3	2.75	3	3	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N101.1	3	2	3	3	3
B-GAG-N101.2	3	2	3	3	3
B-GAG-N101.3	3	3	2	3	3
B-GAG-N101.4	3	3	3	3	3
Average	3	2.5	2.75	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N101.	3	3	3	3	3	3	3	3	3	2	3	3	3
1													
B-GAG-N101.	3	3	3	3	3	3	3	3	3	2	3	3	3
2													
B-GAG-N101.	3	3	3	3	3	2	3	3	3	3	2	3	3
3													
B-GAG-N101.	3	3	3	3	3	3	3	3	3	3	3	3	3
4													
Average	3	3	3	3	3	2.75	3	3	3	2.75	2.75	3	3

B-GAG-N102: Fundamental of Animation

Time: 3 Hrs. Total Marks: 150 Credits: 6 Theory: 75

Internal Assessment: 75

Course Objectives: This course will provide an overview and study of the history of animation and its fundamentals. This subject will shed light on the early magic lantern shows of the late nineteenth century to current and emerging digital animation technologies. This will be accomplished through a series of discussions, lectures, assignments, as well as viewing and evaluating classical Animation films.

Course Learning Outcomes:
After completing the Course, the student will be able to:
B-GAG-N102.1 : Know the History of Animation
B-GAG-N102.2 : Know about the Animation Industry.
B-GAG-N102.3: Learn production Stages and Means of Animation
B-GAG-N102.4 : Get complete knowledge of the different types of Animation

Note:- The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

UNIT-I

Introduction:

- Introduction and Definitions of Animation
- Types of Animation
- Terms Used in Animation: FPS, Thumbnail, Blueprint, Pencil Test, Screenplay, Blocking and Animatics
- Working and usage of: Zoetrope, Phenakistoscope and Thaumatrope.

UNIT-II

History:

- Overview of Animation Film History: Earlier Stage and Modern Era
- Walt Disney, Dream Works, Pixar, J-Stuart Blackton, Winsor Mc Cay
- Overview of Animated Television Channels: Cartoon Network, Discovery Kids, Disney, Pogo, Disney XD and ZEEQ.
- Indian Animation Industry
- Father of Indian Animation

UNIT-III

Process of Animation

Pre-Production

- Idea Generation
- Story Writing: Structure & Genres Principals of Story Writing: Point of view, Characterization, Plot and Conflict.
- Script / Dialogue Writing: Types and Structure
- Model Sheet: Types and Features
- X-Sheet: Types and Features
- Storyboard: Structure & Advantages
- Sound Recording: Process and Features
- Animatics: Structure, Advantages and Process

UNIT-IV

Production

- Layout and Illustrations Designing: Process and Features
- Key-Frames: Types and Uses
- In-betweens Cleanups: Process and Features
- Rendering: Types and Process

Post-Production

- Video Editing: Types
- Sound Mixing: Features
- Dubbing :Features
- Color Correction: Features
- Rendering Authoring

References:

- o 'How to Write for Animation' by Jeffrey Scott's book
- THE TOOLS OF SCREENWRITING: A WRITER'S GUIDE TO THE CRAFT AND ELEMENTS OF A SCREENPLAY by David Howard and Edward Mobley; St. Martins/Griffin; New York; 1993.
- o Storyboard Design course by Giuseppe Cristiano--- Barron's
- o How to write for animation—Jeffery Scott
- o The art of layout and storyboarding- Mark T. Byrne
- Egleiter, Marcie (2011) From Word to Image: Storyboarding and the Filmmaking Process. Michael
- o Wiese Productions. Beiman, Nancy. (2012) Prepare to board. Focal Press.
- o Animation History and Production by AparnaVats, New Delhi Publisher, New Delhi.
- o Fraioli, James O.(2000) Storyboarding 101: A Crash Course in Professional Storyboarding. Michae
- o Wiese Productions. Glebas, Francis.(2008) Directing the Story. Routledge.
- o Hart, John. (2007). The Art of the Storyboard: Storyboarding for Film, TV, and Animation. Focal
- o Press. Simon, Mark.(2006) Storyboards: Motion In Art. Focal Press.
- o Tumminello, Wendy. (2004) Exploring Storyboarding. Course Technology.

B-GAG-N102: Fundamental of Animation

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N102.1	3	3	3	3	3	3	2	3
B-GAG-N102.2	3	3	3	3	3	3	3	3
B-GAG-N102.3	3	3	3	3	3	3	3	3
B-GAG-N102.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N102.1	3	2	3	3	3
B-GAG-N102.2	3	2	3	3	3
B-GAG-N102.3	3	3	3	3	3
B-GAG-N102.4	3	3	3	3	3
Average	3	2.5	3	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N102.1	3	3	3	3	3	3	2	3	3	2	3	3	3
B-GAG-N102.2	3	3	3	3	3	3	3	3	3	2	3	3	3
B-GAG-N102.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N102.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	3	3	2.5	3	3	3

B-GAG-N103: Digital Art & Sketching (Theory)

Time: 3 Hrs. Total Marks: 100 Credits: 4 Theory: 50

Internal Assessment: 50

Course Objectives: This course enables the students to learn the different mediums of Drawing and its importance for animation. This course allows student to learn observation, visualization and visually experiencing the content. This course allows the student to learn and practice drawing for use in Animation Design.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N103.1: Know about Art and Indian concept of Art

B-GAG-N103.2 Know about the different medium and techniques of drawing and painting

B-GAG-N103.3: Understand Light & Shadow, and surface & texture

B-GAG-N104.4: Develop knowledge of Digital Drawing In Photoshop

Note: - The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

UNIT-I

Introduction:

- Define Art
- Origin of Art:
 - Study of Prehistoric Indian Art
 - o Visual Arts & Its Forms & Creative Pedagogies
- Diversity of Shapes, Form, Lines, Textures
- Traditional Art Materials: Pencils, Brushes, Paper, colors
- Drawing, Sketching and Concept Drawing
- Understanding of Light and Shadow
- Landscapes and Composition

UNIT-II

Color Theory

- Perception of Color and Color Wheel
- Mixing of Primary, Secondary and tertiary Colors
- Tint, Shades, Hues, Tones.
- Warm Colors and Cool Colors.
- Different Color schemes (Complimentary, Split Complimentary, Analogous, Triadic etc.

UNIT-III

Art Work

- Pattern Design and 3D Design
- Perspectives on the Creative Process
- Anatomy & Proportions: Body Types, Poses, Facial Expression
- Painting- Water color, Pencil color
- Typography: Elements and Features
- Calligraphy : Elements and Features

UNIT-IV

Digital Tools

- Overview of Photoshop Interface
- Understanding of Pen tool, Brush Tool and Brush Panel
- Shading and Painting techniques in Photoshop
- Use of Opacity, Flow and Pattern
- Digital Panting: Object, Character and Illustration

References:

- Indian painting by Lokesh Chandra Sharma
- o Indian cartoon Art by VeenaBansal
- o Aesthetic of art, Krishna's publisher, Author Nupur Sharma
- o Graphic design by Narender Singh Yadav

B-GAG-N103: Digital Art & Sketching (Theory)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N103.1	3	3	3	2	3	3	3	3
B-GAG-N103.2	3	3	3	3	3	3	3	3
B-GAG-N103.3	3	3	3	3	3	3	3	3
B-GAG-N103.4	3	3	3	3	3	3	2	3
Average	3	3	3	2.75	3	3	2.75	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N103.1	3	2	2	2	3
B-GAG-N103.2	3	3	3	3	3
B-GAG-N103.3	3	3	3	3	3
B-GAG-N103.4	3	3	3	3	3
Average	3	2.75	2.75	2.75	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N103.1	3	3	3	2	3	3	3	3	3	2	2	2	3
B-GAG-N103.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N103.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N103.4	3	3	3	3	3	3	3	2	3	3	3	3	3
Average	3	3	3	2.75	3	3	3	2.75	3	2.75	2.75	2.75	3

B-GAG-N104: Digital Art & Sketching (Practical)

Time: 3 Hrs. Total Marks: 50 Credits: 2 Practical: 25

Internal Assessment: 25

Course Objectives: This course enables the students to learn and practice the different mediums of Drawing and its importance for animation. This course allows student to practice learning through observation. This course allows the student to learn and practice drawing for use in Animation Design.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N104.1: Know about the different medium and techniques of drawing and painting.

B-GAG-N104.2: Understand use of Light and Shadow and surface and texture

B-GAG-N104.3: Draw landscape with proper perspective sense, study to draw trees, plants, buildings, sky etc. to create the animation backgrounds

B-GAG-N104.4: Know Digital Drawing In Photoshop

Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

List of Practical Exercises:
Drawing Anatomy
Pencil shading techniques
Still Life Drawing & Landscape drawing
Cartoon character sketch
Calligraphy & Typography
Analogous Colors and Color Wheel
Stone art and Mandala art
Patterns and 2D design
Textures and 3d Art
Poster Designing
Digital Illustrations (Digital Painting)

B-GAG-N104: Digital Art & Sketching (Practical)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N103.1	3	3	3	3	3	3	3	3
B-GAG-N103.2	3	3	3	3	3	3	3	3
B-GAG-N103.3	3	3	3	3	3	3	3	3
B-GAG-N103.4	3	3	3	3	3	3	2	3
Average	3	3	3	3	3	3	2.75	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N103.1	3	3	2	3	3
B-GAG-N103.2	3	3	3	3	3
B-GAG-N103.3	3	3	3	3	3
B-GAG-N103.4	3	3	3	2	3
Average	3	3	2.75	2.75	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N103.1	3	3	3	3	3	3	3	3	3	3	2	3	3
B-GAG-N103.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N103.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N103.4	3	3	3	3	3	3	2	3	3	3	3	2	3
Average	3	3	3	3	3	3	2.75	3	3	3	2.75	2.75	3

B-GAG-N105: Computer Science (Theory)

Time:2 Hrs. Total Marks: 25
Credits: 1 Theory: 20

Internal Assessment: 5

Course Objectives: This course is designed for theoretical understanding of computer system and its components, functioning and its application software exposure.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N105.1: Understand the basic knowledge of computer system.

B-GAG-N105.2 Know about the functioning of operating systems.

B-GAG-N105.3: Understand the basic concept of Internet and computer networks.

B-GAG-N105.4: Understand the basics of Application Software.

NOTE:- The examiner will set total 10(ten) questions covering the entire syllabus. Student will attempt any five questions. All questions will carry equal marks.

Operating System - Definition & Functions of Operating System, Basics of Popular Operating Systems; The User Interface, Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection, managing files and folders, Control panel – display properties, add/remove software and hardware, Running an Application, Using help; Creating Short cuts, Basics of O.S Setup; Common utilities.

Word Processing: Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, Word Art, Mail Merge, Macros.

Spread Sheet: Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus, Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, Copying of cells, Mathematical, Statistical and Financial function, Drawing different types of charts.

Presentation Software: Creating, modifying and enhancing a presentation, Delivering a presentation, Using sound, animation and design templates in presentation.

References:

- o Help files from Apache Open Office, https://wiki.openoffice.org/wiki/Documentation
- o Channelle Andy, "Beginning OpenOffice 3: From Novice to Professional", aPress Publications
- o Beginning OpenOffice 3: From Novice to Professional, Andichannele, Apress.
- Microsoft Office 2016 Step by Step: MS Office 2016 Step by S_p1, By Joan Lambert, Curtis Frye
- o Computer Fundamentals By Pradeep K. Sinha, Priti Sinha, <u>BPB Publications</u>, <u>6th</u> Edition
- o Getting Started with LibreOffice 5.0, Friends of OpenDocuments Inc., Http://friendsofopendocument.com
- Documentation from LibreOffice, <u>https://documentation.libreoffice.org/en/english-documentation/</u>

B-GAG-N105 Computer Science (Theory)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N105.1	3	3	3	3	3	3	3	3
B-GAG-N105.2	3	3	3	3	3	3	3	3
B-GAG-N105.3	3	3	3	3	3	3	3	3
B-GAG-N105.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	3	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N105.1	3	3	3	3	3
B-GAG-N105.2	3	3	3	3	3
B-GAG-N105.3	3	3	3	3	3
B-GAG-N105.4	3	3	3	3	3
Average	3	3	3	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N105.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N105.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N105.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N105.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	3	3	3	3	3	3	3

B-GAG-N106: Computer Science (Practical)

Time:2 Hrs. Total Marks: 25 Credits: 1 Practical: 20

Internal Assessment: 05

Course Objectives: This course is designed for practical understanding of commonly used application software and its functioning to the students.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N106.1: Use MS-Word

B-GAG-N106.2: Use MS-Excel

B-GAG-N106.3: Use PowerPoint

B-GAG-N106.4: Create Email account, compose & send emails for personal and professional communication.

Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

List of Practical Exercises:

Starting with basics of Operating Systems and its functionalities

Create and format word documents.

Use tables, word Art and other features in your documents.

Use macros to simplify the tasks in a document.

Use mail merge to write once for many.

Use spreadsheet for basic data handling

Apply formulas to sheet for automation.

Use if-else to make certain decisions in a sheet.

Use Charts & Shapes for better visualization of data.

Use filters and data validation controls for control of data

Prepare and format presentations.

Apply slide transitions, animations and sequencing for slides.

Apply different formatting and insert options to make presentation better.

Use rehearse and timing options for a presentation with handouts.

B-GAG-N106: Computer Science (Practical)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N106.1	3	3	3	3	3	3	3	3
B-GAG-N106.2	3	3	3	3	3	3	3	3
B-GAG-N106.3	3	3	3	3	3	3	3	3
B-GAG-N106.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	3	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N106.1	3	3	3	3	3
B-GAG-N106.2	3	3	3	3	3
B-GAG-N106.3	3	3	3	3	3
B-GAG-N106.4	3	3	3	3	3
Average	3	3	3	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N106.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N106.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N106.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N106.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	3	3	3	3	3	3	3

B-GAG -N107: Activity/Hobby

Gita-A Manual of Life (Option-i)

Course Credit: 02 Total Marks: 50 Marks

Contact Hours: 02 per week

Teaching will be based on the discussion in the class room

Note: There will be no written examinations, knowledge and understanding of Gita teachings will be assessed through discussion by the Students describing the knowledge and implementation of Gita's teachings in daily life for the betterment of our day today life.

Course Outcomes:

Unit-1: After studying the first unit of the course students will be able to understand meaning, background & relevance of Gita's teaching's in contemporary times.

Unit-II: After studying the second unit of the course students will be able to understand benefits of Karma Yoga, Bhakti Yoga and Gyana Yoga in our daily life.

Unit-1

Gita for all: Meaning, background and relevance of Gitaopdesha. Karmayoga as a way to right knowledge; Necessity of Loksamgraha for the service of Humanity.

Unit-II

Gita for Spiritual world: Karm Yogi as an Ideal Man of Gita, Sthitaprajna as a symbol of ideal master in Gita, Swadharma and Pradharma as a secret of Blissful society, Atma Samyama Yoga; a technique for building an ideal person according to Gita.

Suggested Books:

- Swami Ramsukhdas, Gita Sadhak Sanjivani Teeka
- Hnuman Prasad Poddhar, Gita Tattvavivechni Teeka
- Gandhi Gita Matta
- Gurudatta Srimadbhagvadgita Vyakhya
- Satyavarta, Srimadbhagvadgita Vyakhya
- Swami Jyanananda, Gita Prerna
- Paramhamsa Yogananda, Srimadbhagvadgita God-Arjuna, Discoruse Aurvind, Essays on Gita.
- S. Radhakrishna, Bhagwvadgita Vyakhya
- Jyaneshwar, Jyaneshwari Gita

B-GAG -N107: Activity/Hobby

Public Speaking (Option-ii)

Course Credit: 02 Total Marks: 50 Marks

Contact Hours: 02 per week

Teaching will be based on the discussion in the class room

Note: There will be no written examinations. Understanding and art of Public speaking will be assessed through discussion and presentation by the Students in the class room.

Course Outcomes:

Unit-1: After studying the first unit of the course students will be able to understand relevance of Public speaking in their academic and professional life.

Unit-II: After studying the second unit of the course students will be able to write their own speech and analyze the intricacies of speeches of renowned speakers.

Unit-1

Public speaking: Meaning and relevance, Characteristics of an effective speaker, Power of words, Use of body language, dressing, mannerisms, Use of effective memory techniques, Overcoming the fear of public speaking- Glossophobia

Unit-II

Speech: Introduction, body and conclusion, Writing your own speeches, famous speeches of World's greatest orators, Case studies of effective public communicators like TED speakers of both Indian and foreign origin

Suggested Books:

- The Art of Public Speaking author Dale Carnegie, along with J. Berg Esenwein, Rupa Publications, India (English and Hindi)
- Speak with no fear, Mike Acker, Advantage Publishing Group
- TED Talks, Chris Anderson, Headline Publishing Group
- 50 Prernadayak Bhashan, Fingerprint Publishing

AECC-N200: Environmental Studies

Time: 3 Hrs. Total Marks: 50 Credits: 2 Theory: 25

Internal Assessment: 25

Scheme of paper: Total number of questions will be nine. Students have to attempt five questions in all. Questions no. 1 is compulsory. All questions carry equal marks. Each question is of 8 marks.

Course objectives: The aim of this course is to make the students aware about the environmental problems and current global issues related to environment. It provides knowledge about concepts of ecosystem and biodiversity and develops interest in the students about their role in conservation of environment and reducing pollution and waste generation in their surroundings. By understanding the environmental problems, their causes and solutions, the students can apply these to their daily lives.

Course Outcomes (COs) for Theory:

COs	On successful completion of the course, the students will be able to:
COS	•
CO 1	Understand the concept of environmental studies, its scope and importance in the conservation of environment. Understand the concept of ecosystem and different types of natural and artificial ecosystems in the world, the biogeochemical cycling and energy flow in an ecosystem.
CO 2	Describe the various renewable and non-renewable natural resources and their over-exploitation due to increasing demands of rising population. Become aware about biodiversity, its importance and the various threats for biodiversity. Have knowledge of the endangered species and their conservation measures that are needed to be adopted at different levels.
CO 3	Have understanding about the types of pollution and how to reduce pollution levels in air, soil, water, land and from marine bodies, as to develop interest in reducing the solid waste generation as well as its management at household level. Gain knowledge of various global environmental issues like climate change, global warming and ozone depletion and also about different environmental laws implemented to conserve the environment.
CO 4	Understand the concept of population growth, disaster management, impacts of drug abuse and various environmental movements.

Course outcome for practical/field work:

CO 1	To get practical knowledge of various environmental issues through project	
	file/assignment with case studies.	

Mode of Paper Setting: Total number of questions set will be nine. Questions no. 1 is compulsory covering the entire syllabus. Two questions will be set from each unit. Students have to attempt five questions in all, one question from each unit including the compulsory question. Each question is of 5 marks. All questions carry equal marks. Final theory exam time allowed will be of 3 hours.

Unit I

Introduction to environmental studies: Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development.

Ecosystems: What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: a) Forest

ecosystem, b) Grassland ecosystem, c) Desert ecosystem, d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (8 lectures)

Unit II

Natural Resources: Renewable and Non-renewable Resources

- •Land resources and landuse change; Land degradation, soil erosion and desertification.
- •Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
- •Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).
- •Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

Biodiversity and Conservation

- •Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
- •India as a mega-biodiversity nation; Endangered and endemic species of India
- •Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
- •Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value. (16 lectures)

Unit III

Environmental Pollution

- •Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- •Nuclear hazards and human health risks
- •Solid waste management: Control measures of urban and industrial waste, Pollution case studies.

Environmental Policies & Practices

- •Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
- •Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
- •Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

(15 lectures)

Unit IV

Human Communities and the Environment

- •Human population growth: Impacts on environment, human health and welfare.
- •Resettlement and rehabilitation of project affected persons; case studies.
- •Disaster management: floods, earthquake, cyclones and landslides.
- •Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan.
- •Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- •Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

Drugs and their effects; Useful and harmful drugs; Use and abuse of drugs; Stimulant and depressant drugs. Concept of drug de-addiction. Legal position on drugs and laws related to drugs.

(6 lectures)

Practical/Field work

- •Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.
- •Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- •Study of common plants, insects, birds and basic principles of identification.
- •Study of simple ecosystems-pond, river, Delhi Ridge, etc.

(Equal to 5 lectures)

Suggested Readings:

- 1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.
- 2.Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India. Univ. of California Press.
- 3. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
- 4.Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
- 5.Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland: Sinauer Associates, 2006.
- 6.Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. Science, 339: 36-37.
- 7.McCully, P. 1996. Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books.
- 8.McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.
- 9.Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.
- 10.Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.
- 11.Rao, M.N. & Datta, A.K. 1987. Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.
- 12.Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. Environment. 8th edition. John Wiley & Sons.
- 13. Rosencranz, A., Divan, S., & Noble, M. L. 2001. Environmental law and policy in India. Tripathi 1992.
- 14. Sengupta, R. 2003. Ecology and economics: An approach to sustainable development. OUP.
- 15. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
- 16. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology: Voices from the Tropics. John Wiley & Sons.
- 17. Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.
- 18. Warren, C. E. 1971. Biology and Water Pollution Control. WB Saunders.
- 19. Wilson, E. O. 2006. The Creation: An appeal to save life on earth. New York: Norton.
- 1) 20. World Commission on Environment and Development. 1987. Our Common Future. Oxford University

B-HIN-N200: Communicative Hindi

Time: 2 Hrs. Total Marks: 50 Credits: 2 Theory: 25

Contact hours per week: 2 Internal assessment: 25

Course Objectives: The Paper is designed to enhance proficiency in Hindi Language. It seeks to develop the basic of Hindi Language through different modules. Each unit will enable the learner to have the communication in Hindi and to share and express ideas and experiences.

Course Learning Outcomes:
After completing the Course, the student will be able to:
B-HIN-N200.1 : Develop the knowledge of basics of Hindi language.
B-HIN-N200.2: Improve vocabulary in Hindi language.
B-HIN-N200.3: : Inculcate the knowledge of grammar in Hindi language

B-HIN-N200.4: Learn correct uses of Hindi language in media writing

Note:- The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

Unit – I

Hkk"kk dh ladYiuk
Hkk"kkbZ Hksn&ekSf[kd ,oa fyf[kr
Hkk"kk dk ekudhdj.k&fLFkfr ,oa pqukSfr;k;
Hkk"kk rFkk lekt dk ikjLifjd vUrlZcU/kA
Unit – II

fgUnh O;kdj.k 'kCn :i vkSj okD; jpuk nsoukxjh fyfi vkSj o`fr mPpkj.k vo;o] i;kZ;] foykse] lekukFkhZ] vusdkFkhZ 'kCn

fgUnh dh iz:ksxkRed =qfV:ka

fgUnh lkfgR; dk laf{klr bfrgkl fgUnh lkfgR; dh vk/kfud izo`fRr;ka fgUnh dh lkfgfR;d fo/kkvksa dk ifjp; fgUnh x|,oa i|

Unit - IV

Unit – III

iz;kstu ewyd fgUnh dk vfHkizk; ,oa vko';drk tulapkj ek/;e vkSj fgUnh Hkk"kk] ehfM;k dh Hkk"kk dh izd`fr ,oa fopyu {ks=h; izHkko ,oa {ks=h; Hkk"kkbZ iz;ksx eqfnzr ek/;e vkSj fgUnh jsfM;ks ,oa Vsyhfotu dh Hkk"kk foKkiu ,oa lks'ky ehfM;k dh Hkk"kk

Suggested Readings:

HkkfV;k] MkW- dSyk'kpUn] vuqokndyk % fl)kar vkSj iz;ksx] r{kf'kyk izdk'ku] u;h fnYyhA

'kekZ] j?kquUnu izlkn] iz;kstu ewyd fgUnh % fl)kar vkSj O;ogkj] fo'ofo|ky; izdk'ku] okjk.klhA

v;~;j] fo'oukFk] vuqokndyk] izHkkr izdk'ku] fnYyh

frokjh] HkksykukFk] fgUnhHkk"kk dh lkekftd Hkwfedk] nf{k.k Hkkjr fgUnh izpkj lfefr] enzkl

>kYVs] MkW- naxy] iz;kstu ewyd fgUnh % fl)kar vkSj iz;ksx] ok.kh izdk'ku] u;hfnYyh

xksnjs] MkW- fouksn] iz;kstu ewyd fgUnh] ok.kh izdk'ku] u;h fnYyh jk.kk] egsUnz flag] iz;kstu ewyd fgUnh ds vk/kqfud vk;ke] g"kkZ izdk'ku] vkxjkA

dqekj pan] tulapkj ek/;eksa esa fgUnh] Dykfldy ifCyf'kax dEiuh] fnYyh

B-HIN-N200 : Communicative Hindi

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-HIN-N200.1	3	3	3	3	2	2	2	3
B-HIN-N200.2	3	3	3	3	2	2	2	3
B-HIN-N200.3	3	3	3	3	2	2	2	3
B-HIN-N200.4	3	3	3	3	2	2	2	3
Average	3	3	3	3	2	2	2	3

CO-PSO Mapping Matrix

СО	PSO1	PSO2	PSO3	PSO4	PSO5
B-HIN-N200.1	2	2	2	2	2
B-HIN-N200.2	2	2	2	2	2
B-HIN-N200.3	2	2	2	2	2
B-HIN-N200.4	2	2	2	2	2
Average	2	2	2	2	2

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-HIN-N200.1	3	3	3	3	2	2	2	3	2	2	2	2	2
B-HIN-N200.2	3	3	3	3	2	2	2	3	2	2	2	2	2
B-HIN-N200.3	3	3	3	3	2	2	2	3	2	2	2	2	2
B-HIN-N200.4	3	3	3	3	2	2	2	3	2	2	2	2	2
Average	3	3	3	3	2	2	2	3	2	2	2	2	2

B-GAG-N201: Digital Design & Raster Graphics (Theory)

Time: 3 Hrs. Total Marks: 100 Credits: 4 Theory: 50

Internal Assessment: 50

Course Objectives: The course is designed to impart the knowledge about Print, Advertising, Graphic Design and its applications.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N201.1: Develop knowledge of software to design raster graphical images

B-GAG-N201.2 Understand the difference between different graphics and image file formats

B-GAG-N201.3: Develop knowledge of using Photoshop's various tools and techniques.

B-GAG-N201.4: Understand Image Retouching and Image Manipulation for Advertising

Note:- The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

UNIT-I

Introduction to graphics:

- Define graphics & types of graphics
- Elements and Principles of graphic design
- Difference between vector and raster images.
- Fonts: Serif, San-Serif, Slab-Serif and Decorative
- Overview of Designing Industry and Designing Trends
- Common Image Formats: JPEG, PNG, SVG, TIFF and GIF

UNIT-II

Raster Graphics

- Introduction to Photoshop: Tools and Menus
- Layers & Layer styles, Opacity, Masking, Adjustment layers, Blending modes,
- Image Editing: Retouching, Color Correction, Smoothing skin & wrinkles.
- Image Manipulation, Filter Gallery
- Portrait enhancements
- Working with typography: Threading text, changing font size and Color, using styles, wrapping text, text on a path, creating Outlines, wrapping text around an object, sampling text.

UNIT-III

Techniques

- Gradient tool and Gradient Map
- Cloning / Stamping, Patch Tool
- Noise Reduce and edges sharpness
- Dodge & Burn Tool
- Page setup
- Action and Batch Render
- Effects: Orton Effect, Retro, Bokeh
- Filters: Liquify, Vanishing Point, Pattern Maker, Artistic

UNIT-IV

Designing process

- Photo Collage, Black & White images to Color, Web Banner
- Social Media: Features, Process and Sizes
- Magazine cover design: Process, Types and Sizes
- Digital Flyer Designs: Features and
- Cartoon character design
- Promotional designs
- Layout process: (create press and magazine layouts)
- Poster design: productive & social
- Newsletter design

References:

- o Golombisky, K., & Hagen, R. (2017). White space is not your enemy: A beginner's guide to communicating visually through graphic, web & multimedia design. CRC Press.
- o Harrington, R. (2012). Understanding Adobe Photoshop CS6: The essential techniques for imaging professionals. Peachpit Press.
- o Gulbins, J. (2013). Mastering Photoshop layers: A photographer's guide. Rocky Nook.

B-GAG-N201: Digital Design & Raster Graphics (Theory)

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N201.1	3	3	3	3	3	3	2	2
B-GAG-N201.2	3	3	3	3	3	3	3	3
B-GAG-N201.3	3	3	3	3	3	3	3	3
B-GAG-N201.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	2.75

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N201.1	3	3	2	3	3
B-GAG-N201.2	3	3	3	2	3
B-GAG-N201.3	3	3	3	2	3
B-GAG-N201.4	3	3	3	3	3
Average	3	3	2.75	2.5	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N201.1	3	3	3	3	3	3	2	2	3	3	2	3	3
B-GAG-N201.2	3	3	3	3	3	3	3	3	3	3	3	2	3
B-GAG-N201.3	3	3	3	3	3	3	3	3	3	3	3	2	3
B-GAG-N201.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	2.75	3	3	2.75	2.5	3

B-GAG-N202: Digital Design & Raster Graphics (Practical)

Time:3 Hrs. Total Marks: 50 Credits: 2 Practical: 25

Internal Assessment: 25

Course Objectives: The aim of the course is to impart the practical knowledge about Print, Advertising, Graphic Design and its applications.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N202.1: Able to use Raster Graphics Software

B-GAG-N202.2: Understand the difference between different graphics and image file formats

B-GAG-N202.3: Become familiar with layer panel and tools

B-GAG-N202.4: Get practical knowledge of Image Retouching techniques

Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

List of Practical Exercises:
Black & White to color conversion of image
Portrait Enhancement & Photo Retouching
Image Manipulation
Day to night conversion of Image
Effects passed exercise
Typography Designs
Social Media Designs
Web Banners
Magazine Cover page and layouts
Newsletter Design
Cartoon Character Designs

B-GAG-N202: Digital Design & Raster Graphics (Practical)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N202.1	3	3	3	3	3	3	3	3
B-GAG-N202.2	3	3	3	3	3	3	3	3
B-GAG-N202.3	3	3	3	3	3	3	2	3
B-GAG-N202.4	3	3	3	3	3	3	2	3
Average	3	3	3	3	3	3	2.5	3

CO-PSO Mapping Matrix

СО	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N202.1	3	3	2	2	3
B-GAG-N202.2	3	3	3	3	3
B-GAG-N202.3	3	3	3	3	3
B-GAG-N202.4	3	3	3	3	3
Average	3	3	2.75	2.75	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N202.1	3	3	3	3	3	3	3	3	3	3	2	2	3
B-GAG-N202.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N202.3	3	3	3	3	3	3	2	3	3	3	3	3	3
B-GAG-N202.4	3	3	3	3	3	3	2	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.5	3	3	3	2.75	2.75	3

B-GAG-N203: Animation Techniques

Time:3 Hrs. Total Marks: 100 Credits:4 Theory: 50

Internal Assessment: 50

Course Objectives: The course is designed to introduce various techniques and styles of Animation, to provide the students hands on experience of simple idea for animation using the materials available in the immediate surroundings, to provide knowledge of ideation and imagination of animation and to introduce procedures and steps for Material Animation as an Example.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N203.1: Understand and apply Principals of Animation

B-GAG-N203.2: Learn various techniques and styles of Animation.

B-GAG-N203.3: Do ideation and imagination of animation

B-GAG-N203.4: Recognize and identify the power of animation which is not restricted to any medium.

Note: - The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

UNIT-I

Introduction:

- Define Script, Key terms used in script (Layout of the story, Characters, Situation, Background)
- Terminology (scene, shot, Fade in and Fade out, Cut to, Scene number, EXT and INT etc.)

Classical & Traditional Animation:

- Define Animation,
- Persistence of Vision.
- Animation & Motion
- Animation Principals
- Flip Book / Flick Book

UNIT-II

Introduction to Storyboard

- Camera Shots and Compositions
- Different Layouts of Storyboard
- Parts of Storyboard
- Tools of Storyboard

Stop Motion Animation

- Define Stop Motion
- Process of Stop Motion
- Key-Framing and Timing,
- Animation Different Techniques
- Basic Lighting Techniques & Camera Setup

UNIT-III

Timing & Spacing (On Flipbook and Lightbox)

- Pendulum Animation
- Vehicle Animation
- Walk Cycle (Adolescent & Adult)
- Jump and Run
- Leaf Animation
- Water Drop & Water Splash

UNIT-IV

Developing a Short Experimental Animation Film

- Cut-Out Animation
- Mix Media Animation
- Add Sound and Audio
- Export and Authoring
- Stop Motion Animation in Animation & VFX Industry
- Student will choose a specific technique and implement his idea as a short film or gag.

References:

- Williams, R. (2012). The animator's survival kit: A manual of methods, principles and formulas for classical, computer, games, stop motion and internet animators. Macmillan.
- Animation History and Production by Aparna vats, publisher New Delhi.
- Thomas, F., & Johnston, O. (1995). The illusion of life: Disney animation. Hyperion.
- Laura Moreno (2014) THE CREATION PROCESS OF 2D ANIMATED MOVIES
- Wells, P. Understanding animation. Routledge.
- Blair, P. (1994). Cartoon animation. Walter Foster Publishing.
- Gasek, T. (2017). Frame-by-frame stop motion: The guide to non-puppet photographic animation techniques (2nd ed.). CRC Press.
- Priebe, K. A. (2011). The advanced art of stop-motion animation. Cengage Learning.

B-GAG-N203: Animation Techniques (Theory)

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N203.1	3	3	3	3	3	3	3	3
B-GAG-N203.2	3	3	3	3	3	3	2	3
B-GAG-N203.3	3	3	3	3	3	3	3	3
B-GAG-N203.4	3	3	3	3	3	3	2	3
Average	3	3	3	3	3	3	2.5	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N203.1	3	2	3	3	3
B-GAG-N203.2	3	3	3	3	3
B-GAG-N203.3	3	3	3	3	3
B-GAG-N203.4	3	2	3	3	3
Average	3	2.5	3	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N203.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N203.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N203.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N203.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	3	3	3	3	3	3	3

B-GAG-N204: Animation Techniques (Practical)

Time:3 Hrs. Total Marks: 50 Credits: 2 Practical: 25

Internal Assessment: 25

Course Objectives: The course is designed to practice various techniques and styles of Animation, to provide the students hands on experience of simple idea for animation using the materials available in the immediate surroundings and to do ideation and imagination of animation.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N204.1: Understand the working of flip book animation technique

B-GAG-N204.2: Able to create little animation movements by using flip book

B-GAG-N204.3: Know the process of stop motion animation by different material

B-GAG-N204.4: Develop skills to handle problem during traditional and stop motion animation production

Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

List of Practical Exercises:

Animate Time on flip book

Develop a Story

Understand Time and Spacing principal by Pendulum animation

Squash and Stretch exercise with the use of ball animation

Object Weight Impact on animation

Leaf animation to understand staging rules

Normal walk cycle of cartoon character

Slow walk cycle of old age character

Animate Humans /Objects with Stop Motion Animation Techniques

Cut-out / Clay, used to produce story-based animation clip

B-GAG-N204: Animation Techniques (Practical)

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N204.1	3	3	3	3	3	3	3	3
B-GAG-N204.2	3	3	3	3	3	3	2	3
B-GAG-N204.3	3	3	3	3	3	3	2	3
B-GAG-N204.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.5	3

CO-PSO Mapping Matrix

СО	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N204.1	3	3	3	3	3
B-GAG-N204.2	3	3	3	3	3
B-GAG-N204.3	3	3	3	3	3
B-GAG-N204.4	3	3	3	3	3
Average	3	3	3	3	3

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N204.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N204.2	3	3	3	3	3	3	2	3	3	3	3	3	3
B-GAG-N204.3	3	3	3	3	3	3	2	3	3	3	3	3	3
B-GAG-N204.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.5	3	3	3	3	3	3

B-GAG-N205: Character Anatomy & Comic Design (Theory)

Time: 3 Hrs. Total Marks: 100 Credits: 4 Theory: 50

Internal Assessment: 50

Course Objectives: The Course is designed to impart the knowledge of character design and its significance. It will help the students to know about history and production process of comic book.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N205.1: Get knowledge about different types of characters design

B-GAG-N205.2: Get knowledge of comic history

B-GAG-N205.3: Understand the anatomy of organic and non-organic characters.

B-GAG-N205.4: Understand the different comic styles along with presentation styles

Note:- The question paper will be divided into five Units containing nine questions. Students are required to attempt five questions in all. There will be two questions in each unit from I to IV and students are required to attempt one question from each unit. Unit V will have only one Compulsory question containing six short notes covering the entire syllabus and students are required to attempt any four. All questions will carry equal marks.

UNIT-I

Introduction:

- Character Designing: History, Types and Process
- Caricature: Features and Types
- Concept of Model Sheet / Expression Sheet
- Comic Book: History and Development

UNIT-II

Shape Language and Design

- Cartoon Character Anatomy & Proportions
- Body Types and Poses, (Fingers, Hands, Arms, Foot and Legs)
- Eyes, Nose, Lips and Hairs: Structure and types (Realistic and Cartoonish) (Male & Female)
- Facial Expression: Anger, Disgust, Fear, Happiness, Sadness and Surprise
- Development of Character Design; Design Character with Shapes and Forms

UNIT-III

Comic Design

- Comic Book: Types & Sizes
- Study Comic Characters
- Principals of Comic Book
- Understand composition in comic
- Designing Process of Comic Book
- Elements of Comic Book

UNIT-IV

Production

- Hand Drawing and Coloring Techniques
- Splash, Explosion, Cracking, Fire
- Concept Character: Features and Scope
- Techniques and use Perspective Angles

References:

- o Blair, P. (1994). Cartoon animation. Walter Foster Publishing.
- o Indian painting by Lokesh Chandra sharma
- o Indian cartoon Art by VeenaBansal
- o Aesthetic of art, Krishna's publisher, Author Nupur Sharma
- O Graphic design by Narender Singh Yadav

B-GAG-N205: Character Anatomy & Comic Design (Theory)

CO-PO Mapping Matrix

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N205.1	3	3	3	3	3	3	3	3
B-GAG-N205.2	3	3	2	3	3	3	3	3
B-GAG-N205.3	3	3	3	3	3	3	3	3
B-GAG-N205.4	3	3	3	3	3	3	3	3
Average	3	3	2.75	3	3	3	3	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N205.1	3	3	3	3	3
B-GAG-N205.2	3	3	3	2	3
B-GAG-N205.3	3	3	3	3	3
B-GAG-N205.4	3	3	3	2	3
Average	3	3	3	2.5	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N205.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N205.2	3	3	3	3	3	3	3	3	3	3	3	2	3
B-GAG-N205.3	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N205.4	3	3	3	3	3	3	3	3	3	3	3	2	3
Average	3	3	3	3	3	3	3	3	3	3	3	2.5	3

B-GAG-N206 Character Anatomy & Comic Design (Practical)

Time:3 Hrs. Total Marks: 50
Credits: 2 Practical: 25

Internal Assessment: 25

Course Objectives: The aim of the course is to impart the knowledge of character design and to teach practical use of digital tools to produce illustrations and landscapes.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N206.1: Learn and Practice the anatomy of organic and non-organic characters

B-GAG-N206.2: Develop and produce story-based comic

B-GAG-N206.3: Able to draw different types of characterfor comics as well as animation

B-GAG-N206.4: Learn pre-production for animation

Note: - The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva voce.

List of Practical Exercises:
Human & Cartoon Character Anatomy
Design Pattern and Layout
Reviews of any Comic Book
Model Sheet & Expression Sheet
Composition in Comic
Cartoon character sketch and Conversation
Comic Book Strip
Action Sheet of Cartoon Character
Perspective Angles
Study of Comic Characters and make Slam Book
Final Output (Comic Book)

B-GAG-N206 Character Anatomy & Comic Design (Practical)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N206.1	3	3	3	3	3	3	3	3
B-GAG-N206.2	3	3	3	3	3	3	3	3
B-GAG-N206.3	3	3	3	3	3	3	2	3
B-GAG-N206.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	3

CO-PSO Mapping Matrix

СО	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N206.1	3	3	3	3	3
B-GAG-N206.2	3	3	3	3	3
B-GAG-N206.3	3	3	3	3	3
B-GAG-N206.4	3	3	3	3	3
Average	3	3	3	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N206.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N206.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N206.3	3	3	3	3	3	3	2	3	3	3	3	3	3
B-GAG-N206.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	3	3	3	3	3	3

B-GAG-N207: Human Values & Ethics (Theory)

Time: 2 Hrs. Total Marks: 50 Credits: 2 Theory: 25

Contact hours per week: 2 Internal Assessment: 25

Course Objectives: This paper will help the learners to understand the need and significance of human values and ethics in their life.

Course Learning Outcomes:

After completing the Course, the student will be able to:

B-GAG-N207.1: correlate the need of human values to sustained happiness and prosperity- the core aspirations of human beings.

B-GAG-N207.2: express the knowledge of human values and analyze their importance in holistic perspective for a peaceful world.

Unit -1

Human Values: Meaning and Definitions

- (a) Understanding the need of human values and value education. Self-exploration, Concept of happiness and prosperity. Right understanding, understanding body as an instrument of I, Living in harmony, reaching highest potential in digital age through care & empathy balancing interests and expectations.
- (b) Basic human values: Honesty, kindness, integrity, courage, co-operation, commitment, cleanliness, spirituality, understanding duties & rights.

Unit-II

Life Values and universal ethics

- (a) Life Values:- Understanding of harmony in yourself family: Trust and respect, society; Co-existence & unity in diversity Nature mutually interacting units and universe.
- (b) Universal Ethics-Loyalty, respect for others, adherence to the law, doing good and avoiding harm to other, accountability, sensitive towards environment. Transparency, impartiality and objectivity.

Suggested Books:-

- 1) Ethics. Integrity and Aptitute (3rd Edition)- M. Karthikeyan Pub: McGraw Hill,
- 2) A foundation course in Human Values and Professional Ethics- RR Gaur. R Sangal. GP Bagaria Pub: abe books
- 3) Ebook-lg- UGC (26-11-2019)
 - PDF- Human Value www.uge.ac.in (available on UGC Website)
- 4) Patanjala Yoga Sutra- Samadhi Pada

B-GAG-N207: Human Values & Ethics (Theory)

CO-PO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
B-GAG-N207.1	3	3	3	3	3	3	3	3
B-GAG-N207.2	3	3	3	3	3	3	3	3
B-GAG-N207.3	3	3	3	3	3	3	2	3
B-GAG-N207.4	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	3

CO-PSO Mapping Matrix

CO	PSO1	PSO2	PSO3	PSO4	PSO5
B-GAG-N207.1	3	3	3	3	3
B-GAG-N207.2	3	3	3	3	3
B-GAG-N207.3	3	3	3	3	3
B-GAG-N207.4	3	3	3	3	3
Average	3	3	3	3	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
B-GAG-N207.1	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N207.2	3	3	3	3	3	3	3	3	3	3	3	3	3
B-GAG-N207.3	3	3	3	3	3	3	2	3	3	3	3	3	3
B-GAG-N207.4	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	3	3	3	3	3	3	2.75	3	3	3	3	3	3