# FACULTY OF VISUAL ARTS & PERFORMING ARTS

# **SYLLABUS**

# **FOR**

# B.DESIGN (MULTIMEDIA) (SEMESTER I – VIII)

**Examination: 2019-20** 



# GURU NANAK DEV UNIVERSITY AMRITSAR

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# B.DESIGN (MULTIMEDIA) (SEMESTER SYSTEM)

## WORKING SCHEDULE

- 8 SEMESTERS PER COURSE
- 2 SEMESTERS PER SESSION
- 19 WEEKS PER SEMESTER
- 30 HOURS PER WEEK
- 570 HOURS PER SEMESTER

### **SEMESTER – I:**

Sr. No.	Course	Total Marks	External Assessment	Exhibit Display	Time Allowed
1.	Drawing & Colour–I	Practical 100	100	_	6 Hrs. each
2.	Introduction to 3D–I	Practical 50	50	_	6 Hrs.
3.	Workshop–I	Practical 50	50	_	6 Hrs.
4.	Elements of Art and Multimedia	Theory 75 Practical	_	_	3 Hrs. 6 Hrs.
		25	25	_	
6.	Communication Skills in English–I (Compulsory)	Theory 50	_	_	3 Hrs.
7.	Punjabi Compulsory	50	_	_	3 Hrs.
	* ਮੁੱਢਲੀ ਪੰਜਾਬੀ	50	_	_	
	* Punjab History & Culture (From Earliest Times to C 320)	50	_	_	
8.	** Drug Abuse: Problem, Management and Prevention (Compulsory Paper)	50	_	_	3 Hrs.

**Total Marks: 400** 

### **Note:**

\*\* Marks of this Paper will not be included in the Total Marks.

<sup>\*</sup> Special Paper in lieu of Punjabi Compulsory for those students who are not domicile of Punjab.

# 1. DRAWING & COLOUR-I (Practical)

Max. Marks: 100

Practical: 100

- Study of metallic objects / glass / wooden objects etc. in various medium like pencil shading – showing proportion / volume / shape & Forms / light shade / fore shortening / Perspective.
- Water Colour / Poster Colours / Oil Colour / Mixed medium and collage.
- Objects (Two/Three) with vegetables / flowers with drapery
   in monochrome / halftone / solid.
- Create Collage and Landscapes
- Element of Perspective: Cone vision, one point perspective / two point perspective and three point perspective / ground line / vanishing point / Perspective of Shadows / Perspective of Reflection / Perspective of Circles / cylinders / foreshortening / lines / Aerial perspective / colour.
- Knowledge of Perspective / Foreshortening / Proportion foreground / middle ground and background / light / shade / shadow etc.
- View Point: 2 Dimension views and 3 Dimensional views
- Primary, Secondary & tertiary colours.
- Understanding HUE, VALUE, TINT & SHADE
- Meaning & understanding of colour intensity by making a chart.

# 2. INTRODUCTION TO 3D-I (Practical)

Max. Marks: 50 Practical: 50

# **Introduction to Computer Graphics and 3D Introduction to 3D**

- User Interface of 3D Software
- Navigating in 3D Software
- Closing and Saving Project in 3D Software

# **Understanding the Viewports of 3D Software**

- Mouse Control
- Making Selections
- Manipulating Objects
- Working with Gizmos

**Working with Animation Tools and Controls:** Move, Rotate and Scale Tools **Change UI Interface**: Working with Pivots

## Working with various types of Modelling

- Nurbs Modelling
- Spline Modelling
- Polygon Modelling

Introduction to Photoshop and its components related to 3d

# 3. WORKSHOP-I (Practical)

Max. Marks: 50 Practical: 50

- Demonstration and practical classes to be conducted on the following mediums in 2D/3D.
- Clay modeling, Plaster of Paris, tin foils, thermo coal, fabrics, waste materials, paper-Mache, tempera, oil color, acrylic colours.
- Experimenting/Innovating with different mediums, materials of choice and submit five project on 3D at the end of the semester.

# 4. ELEMENTS OF ART & MULTIMEDIA (Theory)

**Time Allowed: 3 Hours** 

Max. Marks: 100

Theory: 75

# **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **SECTION-A**

**Elements of Art:** Basics of Art, Objective of Art, Content and Form, Nature of Beauty, Art and Nature, Abstraction

#### **SECTION-B**

**Multimedia:** Introduction to Multimedia, Text, Image, Audio, Video, Animation, Interactive and New Media, Application in Education.

#### **SECTION-C**

- **MS–Word:** Various operations on a file, Toolbars (Standard, Format), Page setup, Border and Shading, Mail merge.
- MS-Power Point: Operations on a file, Application, Various view of slides.

#### **SECTION-D**

- **Digital Imaging:** Color Depth, Resolution, Raster Graphics, Vector Graphics, Multimedia Graphic Tools, Image File Formats, Compression.
- **Digital Audio:** Audio Sampling Rate, Bit Depth, File Formats, Compression, Mono vs. Stereo, Sound Card, Editing and Recording tools.
- **Digital Video:** TV & Video Standards, Time-base, Bit Rate, Frame Size, Frame Rate, File Formats, Compressions, Codecs, Aspect Ratio, Capture Cards, Editing Tools.

# 4. ELEMENTS OF ART & MULTIMEDIA (Practical)

Practical: 25

- MS-Word: Various operations on a file, Toolbars (Standard, Format), Page setup, Border and Shading, Mail merge.
- **MS–Power Point:** Operations on a file, Application, Various view of slides.
- **Digital Imaging:** Color Depth, Resolution, Raster Graphics, Vector Graphics, Multimedia Graphic Tools, Image File Formats, Compression.
- Digital Audio: Audio Sampling Rate, Bit Depth, File Formats, Compression, Mono vs.
   Stereo, Sound Card, Editing and Recording tools.
- **Digital Video:** TV & Video Standards, Time-base, Bit Rate, Frame Size, Frame Rate, File Formats, Compressions, Codecs, Aspect Ratio, Capture Cards, Editing Tools.

# **Create a Presentation in Power-point**

#### PAPER - V: COMMUNICATION SKILLS IN ENGLISH-I

Time: 3 Hours Max. Marks: 50

## **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

## The syllabus is divided in four sections as mentioned below:

#### Section-A

**Reading Skills**: Reading Tactics and strategies; Reading purposes–kinds of purposes and associated comprehension; Reading for direct meanings.

#### Section-B

Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions.

## **Activities:**

- Comprehension questions in multiple choice format
- Short comprehension questions based on content and development of ideas

#### Section-C

**Writing Skills**: Guidelines for effective writing; writing styles for application, personal letter, official/business letter.

#### **Activities:**

- Formatting personal and business letters.
- Organising the details in a sequential order

#### Section-D

Resume, memo, notices etc.; outline and revision.

#### **Activities:**

- Converting a biographical note into a sequenced resume or vice-versa
- Ordering and sub-dividing the contents while making notes.
- Writing notices for circulation/ boards

#### **Recommended Books:**

- Oxford Guide to Effective Writing and Speaking by John Seely.
- English Grammar in Use (Fourth Edition) by Raymond Murphy, CUP

# PAPER – VI: ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ ਕੁਲ ਅੰਕ : 50

# ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

#### ਸੈਕਸਨ-ਏ

ਆਤਮ ਅਨਾਤਮ (ਕਵਿਤਾ ਭਾਗ), (ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ) ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ। (ਪ੍ਰਸਗ ਸਾਹਤ ਵਿਆਖਿਆ, ਸਾਰ)

#### ਸੈਕਸਨ-ਬੀ

ਇਤਿਹਾਸਕ ਯਾਦਾਂ (ਇਤਿਹਾਸਕ ਲੇਖ–ਸੰਗ੍ਰਹਿ) ਸੰਪਾ. ਸ.ਸ.ਅਮੋਲ, ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ। (ਲੇਖ 1 ਤੋਂ 6) (ਨਿਬੰਧ ਦਾ ਸਾਰ, ਲਿਖਣ-ਸ਼ੈਲੀ)

### ਸੈਕਸ਼ਨ-ਸੀ

- (ੳ) ਪੈਰ੍ਹਾ ਰਚਨਾ
- (ਅ) ਪੈਰ੍ਹਾ ਪੜ੍ਹ ਕੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ।

## ਸੈਕਸ਼ਨ-ਡੀ

- (ੳ) ਪੰਜਾਬੀ ਧੁਨੀ ਵਿਉਂਤ : ਉਚਾਰਨ ਅੰਗ, ਉਚਾਰਨ ਸਥਾਨ ਤੇ ਵਿਧੀਆਂ, ਸਵਰ, ਵਿਅੰਜਨ, ਸਰ-ਖ਼ੁਕਪ
- (ਅ) ਭਾਸ਼ਾ ਵੰਨਗੀਆਂ : ਭਾਸ਼ਾ ਦਾ ਟਕਸਾਲੀ ਰੂਪ, ਭਾਸ਼ਾ ਅਤੇ ਉਪ-ਭਾਸ਼ਾ ਦਾ ਅੰਤਰ, ਪੰਜਾਬੀ ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ ਪਛਾਣ-ਚਿੰਨ੍ਹ।

# ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- 1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- 2. ਵਿੰਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- ਹਰੇਕ ਪਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
- 4. ਪੇਪਰ ਸੈੰਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

# PAPER – VI: ਮੁੱਢਲੀ ਪੰਜਾਬੀ (In lieu of Compulsory Punjabi)

ਸਮਾਂ : 3 ਘੰਟੇ ਕੁਲ ਅੰਕ: 50

# ਪਾਠ-ਕ੍ਰਮ

## ਸੈਕਸ਼ਨ-ਏ

ਪੈਂਤੀ ਅੱਖਰੀ, ਅੱਖਰ ਕ੍ਰਮ, ਪੈਰ ਬਿੰਦੀ ਵਾਲੇ ਵਰਣ ਅਤੇ ਪੈਰ ਵਿਚ ਪੈਣ ਵਾਲੇ ਵਰਣ ਅਤੇ ਮਾਤ੍ਰਵਾਂ (ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ) ਲਗਾਖਰ (ਬਿੰਦੀ, ਟਿੱਪੀ, ਅੱਧਕ) : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ

### ਸੈਕਸ਼ਨ-ਬੀ

ਪੰਜਾਬੀ ਸ਼ਬਦ-ਬਣਤਰ : ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ (ਸਾਧਾਰਨ ਸ਼ਬਦ, ਸੰਯੁਕਤ ਸ਼ਬਦ, ਮਿਸ਼ਰਤ ਸ਼ਬਦ, ਮੂਲ ਸ਼ਬਦ, ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ)

## ਸੈਕਸ਼ਨ-ਸੀ

ਨਿੱਤ ਵਰਤੋਂ ਦੀ ਪੰਜਾਬੀ ਸ਼ਬਦਾਵਲੀ : ਬਾਜ਼ਾਰ, ਵਪਾਰ, ਰਿਸ਼ਤੇ–ਨਾਤੇ, ਖੇਤੀ ਅਤੇ ਹੋਰ ਧੰਦਿਆਂ ਆਦਿ ਨਾਲ ਸੰਬੰਧਤ।

### ਸੈਕਸ਼ਨ-ਡੀ

ਹਫ਼ਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਂ, ਬਾਰ੍ਹਾਂ ਮਹੀਨਿਆਂ ਦੇ ਨਾਂ, ਰੁੱਤਾਂ ਦੇ ਨਾਂ, ਇਕ ਤੋਂ ਸੋਂ ਤਕ ਗਿਣਤੀ ਸ਼ਬਦਾਂ ਵਿਚ

# ਅੰਕ–ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- 1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- 2. ਵਿੰਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
- 4. ਪੇਪਰ ਸੈੰਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

# PAPER – VI: Punjab History & Culture (From Earliest Times to C 320)

# (Special Paper in lieu of Punjabi Compulsory) (For those students who are not domicile of Punjab)

Time: 3 Hours Max. Marks: 50

# **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### Section-A

- 1. Physical features of the Punjab and its impact on history.
- 2. Sources of the ancient history of Punjab

#### Section-B

- 3. Harappan Civilization: Town planning; social, economic and religious life of the Indus Valley People.
- 4. The Indo-Aryans: Original home and settlements in Punjab.

#### Section-C

- 5. Social, Religious and Economic life during Rig Vedic Age.
- 6. Social, Religious and Economic life during Later Vedic Age.

#### Section-D

- 7. Teachings and impact of Buddhism
- 8. Jainism in the Punjab

#### **Suggested Readings:**

- 1. L. M Joshi (ed.), *History and Culture of the Punjab*, Art-I, Patiala, 1989 (3<sup>rd</sup> edition)
- 2. L.M. Joshi and Fauja Singh (ed.), *History of Punjab*, Vol.I, Patiala 1977.
- 3. Budha Parkash, Glimpses of Ancient Punjab, Patiala, 1983.
- 4. B.N. Sharma, Life in Northern India, Delhi. 1966.
- 5. Chopra, P.N., Puri, B.N., & Das, M.N.(1974). A Social, Cultural & Economic History of India, Vol. I, New Delhi: Macmillan India.

# PAPER – VII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION (COMPULSORY PAPER)

#### PROBLEM OF DRUG ABUSE

Time: 3 Hours Max. Marks: 50

## **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### Section – A

#### **Meaning of Drug Abuse:**

Meaning, Nature and Extent of Drug Abuse in India and Punjab.

#### Section - B

# **Consequences of Drug Abuse for:**

Individual : Education, Employment, Income.

Family : Violence. Society : Crime.

Nation : Law and Order problem.

## Section – C

# **Management of Drug Abuse:**

Medical Management: Medication for treatment and to reduce withdrawal effects.

#### Section – D

Psychiatric Management: Counselling, Behavioural and Cognitive therapy. Social Management: Family, Group therapy and Environmental Intervention.

#### **References:**

- 1. Ahuja, Ram (2003), Social Problems in India, Rawat Publication, Jaipur.
- 2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
- 3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
- 4. Kapoor. T. (1985) Drug epidemic among Indian Youth, New Delhi: Mittal Pub.
- 5. Kessel, Neil and Henry Walton. 1982, Alcohalism. Harmond Worth: Penguin Books.
- 6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
- 7. National Household Survey of Alcohol and Drug abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
- 8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
- 9. Sain, Bhim 1991, *Drug Addiction Alcoholism*, Smoking obscenity New Delhi: Mittal Publications.
- Sandhu, Ranvinder Singh, 2009, Drug Addiction in Punjab: A Sociological Study.
   Amritsar: Guru Nanak Dev University.
- 11. Singh, Chandra Paul 2000. Alcohol and Dependence among Industrial Workers: Delhi: Shipra.
- 12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation*, Cambridge University Press.
- 13. Verma, P.S. 2017, "*Punjab's Drug Problem: Contours and Characterstics*", Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
- 14. World Drug Report 2016, United Nations office of Drug and Crime.
- 15. World Drug Report 2017, United Nations office of Drug and Crime.

## **SEMESTER – II:**

S. No.	Course	Total Marks	External Assessment	Time Allowed
1.	Drawing & Colour–II	Practical		
		75	75	6 Hrs.
2.	Introduction to 3D–II	Practical		
		50	50	6 Hrs.
3.	Theory of Media	Theory		
	(Print Media & Scriptwriting)	75	_	3 Hrs.
4.	Workshop-II	Practical		
	(Photography & Adobe Lightroom)	50	50	6 Hrs.
5.	Adobe Illustrator	Practical	50	
		50		6 Hrs.
6.	Communication Skill in English-II	Theory		
	(Compulsory)	35	_	3 Hrs.
		Practical		
		15		
7.	Punjabi Compulsory /	Theory		
	* ਮੁੱਢਲੀ ਪੰਜਾਬੀ (Basic Punjabi)	50	_	3 Hrs.
	* Punjab History & Culture	Theory	_	
	(C 320 to 1000 B.C.)	50		
8.	** Drug Abuse: Problem, Management	(Theory)	_	_
	and Prevention (Compulsory Paper)	50		

**Total Marks: 400** 

# **Note:**

<sup>\*</sup> Special Paper in lieu of Punjabi Compulsory for those students who are not domicile of Punjab.

<sup>\*\*</sup> Marks of this Paper will not be included in the Total Marks.

# 1. DRAWING & COLOUR-II (Practical)

Max. Marks: 75 Practical: 75

- Detail study of human skeleton (full size) in any medium.
- Study of human figure (male/ female), full figure, detail figure.
- Detail study of different part of the body
- Detail study of full human figure in different postures
- Quick sketches with brush, pen and ink
- Facial Expression, Mood and Seasons
- Lights and Shade effects on colours
  - a) Illusion
  - b) Abstract
  - c) Formative
  - d) Realistic
  - Colours schemes Analogous, Complementary, Monochromatic, Achromatic, Adjacent colours.
  - Create Storyboard using any medium.

# 2. INTRODUCTION TO 3D-II (Practical)

Max. Marks: 50 Practical: 50

## Hierarchy and Maya Object Structure

- Understanding Nodes
- Parents and Children

# **Understanding Shading Concepts**

- Shading
- Shader Types

# Working with various Shaders and there parameters

# **Animation in Maya**

- Creating Key frames
- Copying Key frames and Moving Pivots
- Fine Tuning Animation

# Working with UVs and Camera

## **Basics of Lighting**

- Spot Light
- Area Light
- Directional Light

Components of Photoshop related to 3D Models and texture.

# 3. THEORY OF MEDIA (PRINT MEDIA & SCRIPTWRITING) (Theory)

Max. Marks: 75

Time: 3 Hours Theory: 75

## **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **SECTION-A**

## **Print Media: Printing**

- a) Lithography
- b) Monotype
- c) Stencil
- d) Wood engraving and wood cut

#### **SECTION-B**

# **Types of Modern Printing**

- a) Letterpress
- b) Offset printing
- c) Silkscreen Printing
- d) Gravure
- e) Flexography

#### **SECTION-C**

### **Printing plates and processes**

**Print Media**– Newspapers, Magazine, direct Mailer & Non–Standard etc.

- a) Types of Print Advertisements
  - Newspaper
  - Magazine

# b) Types of Newspaper/Magazine Advertisements

- Classified
- Business Card
- Display Ads

#### **SECTION-D**

### **Script Writing:**

- Terminology, Concepts, Themes & Loglines
- Beat Sheets, Treatments & Outlines
- Approaches to Developing Character and Dialogue
- Screenplay Format and Conflict
- Writing Scenes
- Soap, Talk Shows, Music, Variety and Live Event scripts
- Feature Film, Documentaries, Docu-dramas and Multi-media

# 4. WORKSHOP-II (Photography & Adobe Lightroom) (Practical)

Max. Marks: 50 Practical: 50

## **Photography:**

Importance of Photography in relation to Design and Communication

- Types of Cameras
- Handling the Camera, understanding different kinds of camera and exposures.
- Understanding different kinds of films
- Camera– Parts & Lenses
- Function-Aperture, Shutter Speed, Film, ISO
- Experiment with different light & angles
- Composition & layout
- Table Top Photography
- Fashion photography
- Indoor and outdoor photography
- Art photography
- Developing Black and White film in the dark room

## Adobe Lightroom

#### Introduction

• Lightroom Workflow

### The Lightroom Interface

- Panels
- Filmstrip
- Setting Preferences
- Frequently used keyboard shortcuts

#### Library

- Importing and reviewing images
- Editing and ranking images
- Quick Develop mode
- Using Collections
- Asset management–Metadata and Keywords
- Recommended workflow

# **Develop**

- Navigating the image and view options
- Using and creating Presets, Snapshots and History
- Making Color and Tonal Adjustments
- Using Adjustment brushes and the Gradient Tool
- Creating Grayscale or Toned images
- Detail and Lens Corrections
- Exporting and Photoshop workflow integration

#### **Slideshow**

- Building a slideshow
- Image selection
- Configuring the Slideshow
- Using Templates and settings
- Playing and Exporting

#### **Print**

- Selecting photos
- Using Templates
- Print Layout
- Output Settings-Color management

#### Web

- Selecting photos
- Gallery templates
- Customizing settings
- Uploading website via FTP

# 5. ADOBE ILLUSTRATOR (Practical)

Max. Marks: 50 Practical: 50

- Introduction to Illustrator
- Difference between Vector Graphics and Bitmap Graphics
- Creating, Opening, Closing & Saving a file
- Tool Bar
- Palettes
- Grid & Guideline
- Ruler Setting
- Paths—with all options
- Importing & Exporting
- Printing a document
- Filters
- Layers
- All Menus

**Reference Book:** Adobe Illustrator classroom in a Book (Adobe Publishing)

Note: The students should submit five Assignments. (i.e. Illustration, greeting cards etc.)

#### PAPER - VI: COMMUNICATION SKILLS IN ENGLISH-II

Time: 3 Hours

Max. Marks: 50 Theory Marks: 35 Practical Marks: 15

#### **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **Course Contents:**

#### **SECTION-A**

**Listening Skills:** Barriers to listening; effective listening skills; feedback skills. **Activities:** Listening exercises – Listening to conversation, News and TV reports

#### **SECTION-B**

Attending telephone calls; note taking and note making.

**Activities:** Taking notes on a speech/lecture

#### **SECTION-C**

**Speaking and Conversational Skills:** Components of a meaningful and easy conversation; understanding the cue and making appropriate responses; forms of polite speech; asking and providing information on general topics.

**Activities:** 

- 1) Making conversation and taking turns
- 2) Oral description or explanation of a common object, situation or concept

#### **SECTION-D**

The study of sounds of English,

Stress and Intonation.

Situation based Conversation in English,

Essentials of Spoken English. **Activities:** Giving Interviews

#### PRACTICAL / ORAL TESTING

Marks: 15

#### **Course Contents:-**

- 1. Oral Presentation with/without audio visual aids.
- 2. Group Discussion.
- 3. Listening to any recorded or live material and asking oral questions for listening comprehension.

#### **Questions:-**

- 1. Oral Presentation will be of 5 to 10 minutes duration (Topic can be given in advance or it can be student's own choice). Use of audio visual aids is desirable.
- 2. Group discussion comprising 8 to 10 students on a familiar topic. Time for each group will be 15 to 20 minutes.

**Note:** Oral test will be conducted by external examiner with the help of internal examiner.

# $B.DESIGN\left(MULTIMEDIA\right)\left(SEMESTER-II\right)$

# PAPER – VII: ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ ਕੁਲ ਅੰਕ : 50

# ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਪਾਠ-ਪੁਸਤਕਾਂ

#### ਸੈਕਸ਼ਨ-ਏ

ਆਤਮ ਅਨਾਤਮ (ਕਹਾਣੀ ਭਾਗ), (ਸੰਪ. ਸੁਹਿੰਦਰ ਬੀਰ ਅਤੇ ਵਰਿਆਮ ਸਿੰਘ ਸੰਧੂ) ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਯੂਨੀਵਰਸਿਟੀ, ਅੰਮ੍ਰਿਤਸਰ। (ਵਿਸ਼ਾ-ਵਸਤੁ, ਪਾਤਰ ਚਿਤਰਨ)

#### ਸੈਕਸ਼ਨ-ਬੀ

ਇਤਿਹਾਸਕ ਯਾਦਾਂ (ਇਤਿਹਾਸਕ ਲੇਖ–ਸੰਗ੍ਰਹਿ) ਸੰਪਾ. ਸ.ਸ.ਅਮੋਲ, ਪੰਜਾਬੀ ਸਾਹਿਤ ਪ੍ਰਕਾਸ਼ਨ, ਲੁਧਿਆਣਾ। (ਲੇਖ 7 ਤੋਂ 12) (ਸਾਰ, ਲਿਖਣ ਸ਼ੈਲੀ)

#### ਸੈਕਸਨ-ਸੀ

(**ੳ) ਸ਼ਬਦ-ਬਣਤਰ ਅਤੇ ਸ਼ਬਦ ਰਚਨਾ** : ਪਰਿਭਾਸ਼ਾ, ਮੁੱਢਲੇ ਸੰਕਲਪ

# (भ्र) यवट येटा.म.

# ਸੈਕਸ਼ਨ-ਡੀ

- (ੳ) ਸੰਖੇਪ ਰਚਨਾ
- (ਅ) ਮੁਹਾਵਰੇ ਅਤੇ ਅਖਾਣ

# ਅੰਕ–ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- 1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- 2. ਵਿੰਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿੰਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
- 4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

# PAPER – VII: ਮੁੱਢਲੀ ਪੰਜਾਬੀ

(In lieu of Compulsory Punjabi)

ਸਮਾਂ: 3 ਘੰਟੇ ਕੁਲ ਅੰਕ: 50

ਪਾਠ-ਕ੍ਰਮ

## ਸੈਕਸ਼ਨ-ਏ

ਸ਼ਬਦ ਸ਼੍ਰੇਣੀਆਂ : ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ (ਨਾਂਵ, ਪੜਨਾਂਵ, ਕਿਰਿਆ, ਵਿਸ਼ੇਸ਼ਣ, ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ, ਸਬੰਧਕ, ਯੋਜਕ ਅਤੇ ਵਿਸਮਿਕ)

#### ਸੈਕਸ਼ਨ-ਬੀ

**ਪੰਜਾਬੀ ਵਾਕ ਬਣਤਰ** : ਮੁੱਢਲੀ ਜਾਣ-ਪਛਾਣ

(ੳ) ਸਾਧਾਰਨ ਵਾਕ, ਸੰਯੁਕਤ ਵਾਕ ਅਤੇ ਮਿਸ਼ਰਤ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)

(ਅ) ਬਿਆਨੀਆ ਵਾਕ, ਪ੍ਰਸ਼ਨਵਾਚਕ ਵਾਕ ਅਤੇ ਹੁਕਮੀ ਵਾਕ (ਪਛਾਣ ਅਤੇ ਵਰਤੋਂ)

## ਸੈਕਸ਼ਨ-ਸੀ

ਪੈਰ੍ਹਾ ਰਚਨਾ ਸੰਖੇਪ ਰਚਨਾ

### ਸੈਕਸ਼ਨ-ਡੀ

ਚਿੱਠੀ ਪੱਤਰ (ਘਰੇਲੂ ਅਤੇ ਦਫ਼ਤਰੀ) ਅਖਾਣ ਅਤੇ ਮੁਹਾਵਰੇ

# ਅੰਕ-ਵੰਡ ਅਤੇ ਪਰੀਖਿਅਕ ਲਈ ਹਦਾਇਤਾਂ

- 1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹੋਣਗੇ। ਹਰ ਭਾਗ ਵਿਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।
- 2. ਵਿੰਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਭਾਗ ਵਿਚੌਂ ਇਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।
- 3. ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ ਅੰਕ ਹਨ।
- 4. ਪੇਪਰ ਸੈੱਟ ਕਰਨ ਵਾਲਾ ਜੇਕਰ ਚਾਹੇ ਤਾਂ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ ਅੱਗੋਂ ਵੱਧ ਤੋਂ ਵੱਧ ਚਾਰ ਉਪ-ਪ੍ਰਸ਼ਨਾਂ ਵਿਚ ਕਰ ਸਕਦਾ ਹੈ।

# PAPER – VII: Punjab History & Culture (C 320 to 1000 B.C.)

(Special Paper in lieu of Punjabi compulsory) (For those students who are not domicile of Punjab)

Time: 3 Hours Max. Marks: 50

# **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### Section-A

- 1. Alexander's Invasion and its Impact
- 2. Punjab under Chandragupta Maurya and Ashoka.

#### Section-B

- 3. The Kushans and their Contribution to the Punjab.
- 4. The Panjab under the Gupta Empire.

#### Section-C

- 5. The Punjab under the Vardhana Emperors
- 6. Socio-cultural History of Punjab from 7<sup>th</sup> to 1000 A.D.

#### Section-D

- 7. Development of languages and Education with Special reference to Taxila
- 8. Development of Art & Architecture

# **Suggested Readings:**

- 1. L. M Joshi (Ed), *History and Culture of the Punjab*, Art-I, Punjabi University, Patiala, 1989 (3<sup>rd</sup> Edition)
- 2. L.M. Joshi and Fauja Singh (Ed.), *History of Punjab*, Vol. I, Punjabi University, Patiala, 1977.
- 3. Budha Parkash, *Glimpses of Ancient Punjab*, Patiala, 1983.
- 4. B.N. Sharma: Life in Northern India, Delhi. 1966.

# PAPER – VIII: DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION (COMPULSORY PAPER)

#### DRUG ABUSE: MANAGEMENT AND PREVENTION

Time: 3 Hours Max. Marks: 50

#### **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### Section - A

# **Prevention of Drug abuse:**

Role of family: Parent child relationship, Family support, Supervision, Shaping values, Active Scrutiny.

#### Section - B

School: Counselling, Teacher as role-model. Parent-teacher-Health Professional Coordination, Random testing on students.

## Section - C

### **Controlling Drug Abuse:**

Media: Restraint on advertisements of drugs, advertisements on bad effects of drugs, Publicity and media, Campaigns against drug abuse, Educational and awareness program

#### Section – D

Legislation: NDPs act, Statutory warnings, Policing of Borders, Checking Supply/Smuggling of Drugs, Strict enforcement of laws, Time bound trials.

#### **References:**

- 1. Ahuja, Ram (2003), Social Problems in India, Rawat Publication, Jaipur.
- 2. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India, 2004.
- 3. Inciardi, J.A. 1981. *The Drug Crime Connection*. Beverly Hills: Sage Publications.
- 4. Kapoor. T. (1985) Drug Epidemic Among Indian Youth, New Delhi: Mittal Pub.
- 5. Kessel, Neil and Henry Walton. 1982, Alcohalism. Harmond Worth: Penguin Books.
- 6. Modi, Ishwar and Modi, Shalini (1997) *Drugs: Addiction and Prevention*, Jaipur: Rawat Publication.
- 7. National Household Survey of Alcohol and Drug Abuse. (2003) New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences, 2004.
- 8. Ross Coomber and Others. 2013, *Key Concept in Drugs and Society*. New Delhi: Sage Publications.
- 9. Sain, Bhim 1991, *Drug Addiction Alcoholism*, Smoking Obscenity, New Delhi: Mittal Publications.
- Sandhu, Ranvinder Singh, 2009, Drug Addiction in Punjab: A Sociological Study.
   Amritsar: Guru Nanak Dev University.
- 11. Singh, Chandra Paul 2000. *Alcohol and Dependence among Industrial Workers*: Delhi: Shipra.
- 12. Sussman, S and Ames, S.L. (2008). *Drug Abuse: Concepts, Prevention and Cessation,* Cambridge University Press.
- 13. Verma, P.S. 2017, "*Punjab's Drug Problem: Contours and Characterstics*", Economic and Political Weekly, Vol. LII, No. 3, P.P. 40-43.
- 14. World Drug Report 2016, United Nations office of Drug and Crime.
- 15. World Drug Report 2017, United Nations office of Drug and Crime.

# B.DESIGN (MULTIMEDIA) (SEMESTER SYSTEM)

# **SEMESTER-III:**

Sr. No.	Course	Total Marks	External Assessment	Time Allowed
1.	Film Appreciation–I	Theory 100	-	3 Hrs.
2.	Animation in 3D	Practical 50	50	6 Hrs.
3.	Adobe Photoshop	Theory 50 Practical 50	50	3 Hrs. 6 Hrs.
4.	HTML 5	Theory 50 Practical 100	100	3 Hrs. 6 Hrs.
5	Corel Draw	Practical 100	100	6 Hrs.
6	Project-I	Practical 50	50	6 Hrs.

**Total Marks: 550** 

#### 1. FILM APPRECIATION-I

**Time: 3 Hours** 

Max.Marks: 100

Theory: 100

#### **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **Section A**

### 1. Brief introduction to Performing Art

a) Dance & Drama

Classical Sanskrit plays, Techniques, Vernacular, form, Ballet, Skit, Fold

#### Section B

2. Music Vedic, Traditional, Classical, devotional, Ghazal, Traditional instruments.

#### Section C

### 3. History of Indian Cinema

- a) Introduction, extent of industry
- b) A Multilanguage industry
- c) Hindi Film, the Bengal Art Film

#### **Section D**

### 4. Types of Films

War Films, Horror Films, Detective, Thriller and Spy Films, Social Fictions, Documentary Films, Ad Film

# 2. ANIMATION IN 3D (Practical)

Max. Marks:

50

External: 50

## **Basics of Character Modelling**

- Blocking out the body
- Building the Head
- Shaping the Nose
- The Mouth

## **Creating the Ear and Eyes**

- Getting to Know the Ear
- Start Building the Ear
- Detailing of Eyes

# **Modelling the Body**

- Crafting the Figure
- Arms and Legs
- Hands and Feet

# **Principle of Animation**

- Draw Walk Cycle
- Draw Run Cycle
- Draw Jump Cycle
- Draw Push/Drag

## **Character Rigging**

- Overview of Rigging
- Understanding Joints
- Deformers
- Nodes and Connections
- Kinematics
- Smooth and Rigid Binding

### Rendering

- Rendering Engines
- Global illumination and Ambient Occlusion
- Understanding the concept of Retracing
- Render Window

### 3. ADOBEPHOTOSHOP

(Theory) (Practical)

**Time: 3 Hours** 

Max.Marks:100 Theory: 50 External: 50

#### **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **Section A**

- 1) Introduction to graphics, vector graphics &bitmaps
- 2) Understanding image size resolution
- 3) Relation between resolution, File sizes &output

#### **Section B**

- 4) Using Menu & Colour palettes
- 5) Concept of Path (Segment, Anchor, Curved, Closed, Open, Subpath)
- 6) Working with Photoshop Tools
- 7) Working with Masks & Histogram

#### **Section C**

- 8) Importing & exporting images
- 9) Working with Layers, Channels & paths, Actions, History
- 10) Using navigator & Photoshop plugins.

#### **Section D**

- 11) Integrating with Webpages
- 12) Understanding Digital Images

Five assignments should be submitted by the student (Magazine, ad, Posters, Image editing, Motion graphics, product ad. Etc)

4. HTML 5 (Theory) (Practical)

Max.Marks: 150

Theory: 50 External: 100

Time: 3 Hours

# **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

### **Section A**

- WebPage Building Block
- Basic HTML Structure
- Working with Web Page Files

#### **Section B**

- HTML Forms
- WebPage Graphics
- Working with Text, Images and Other Multimedia
- Backgrounds
- Working with Lists

#### **Section C**

- Animated Graphics
- Page Design & Layout with Links
- Working with Tables and Divs

#### **Section D**

- Introduction to CSS3
- Working with Style Sheets and Selector

# 5. Corel Draw (Practical)

Max. Marks: 100 External: 100

- -Using menus, Standard toolbar, Property Bar and Dialog Boxes
- -Drawing Rectangles, Ellipses, Polygons, Stars, Spirals & Graph paper
- -Drawing lines of all shapes & Sizes
- -Creating & Manipulating Text
- -Selecting and Transforming Objects
- -Shaping Objects, Filling Objects, Outlining Objects
- -Object Ordering, Layers & the object Manager
- -Combining, Breaking Apart, Grouping, Ungrouping, Separating & Converting to Curves
- -Weld, Intersection & Trim
- -Aligning, Distributing, Copying, Pasting & Cloning
- -Enveloping & perspective, Extruding, Blending & Countering
- -Lens, Transparency& Power-clip
- -Colour-Management, Scanning and Auto Tracing
- -Importing & Opening Files, Exporting & Saving Files.
- -Page Setup, Printing, Styles, Templates & Scrapbooks
- -Creating Custom Arrowheads, Patterns, Symbols & Line Styles

**Project:** Five assignments should be submitted by the student (i.e. Ad design, Poster, Folders, Pamphlet, Press Ad, Calendar etc

# 6. PROJECT – I

Max. Marks: 50

External: 50

Project should be completed on the basis all the software covered during the semester

# B.DESIGN (MULTIMEDIA) (SEMESTER SYSTEM)

# **SEMESTER-IV:**

Sr. No.	Course	Total Marks	External Assessment	Time Allowed
1.	Flash	Theory 50 Practical	100	3 Hrs.
		100		6 Hrs.
2.	PHP	Practical 100	100	6 Hrs.
3.	Dream Weaver	Practical 100	100	6 Hrs.
4.	Film Appreciation–II	Theory 50 Practical	50	3 Hrs.
5.	Project– II	50 Practical 100	50 100	6 Hrs. 6 Hrs.
6.	* (ESL-221): Environmental Studies–I (Compulsory) (Theory)	Theory 100	_	

**Total Marks: 550** 

Note: \* Marks of this Paper will not be included in the Total Marks.

#### 1. FLASH

Max.Marks:150

Time: 3 Hours Theory: 50 Practical (External): 100

#### **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### Section A

Animation Fundamentals:-1) Introduction, History, Systems, Techniques, managing windows & panels, Toolbox, Document window

Drawing in Flash:-2)

Working with objects, Using Primary drawing tools

Working with selection tools

Creating lines, choosing line styles, Drawing panels, Symbols & instances

3) Working with colors &text

Color basics Color panels, Color mixer panels, Text field types, Text tool Modifying text

#### **Section B**

4) Basic Interactivity to Flash Movies Actions & Event Handlers

Graphics & 2D Animation 5) Working with Graphics Animation software Flash Symbols Working with Libraries!

Basic methods of Flash Animation

Frame-by-Frame Animation

### **Section C**

**Character Animation Techniques** 6)

Storvboard

**Cartoon Animation Basics** 

Coloring the art Flashed Tweening

Backgrounds & Scenery

Integrating Media Files with Flash 7)

Adding sound

Importing Sounds to Flash Synchronizing Audio to animations Stopping sounds, Editing Audio in Flash

## Section D

Embedding video 8) Preparing a video file importing the video Publishing Flash movies with video Using Sorenson Squeeze for Flash video

# 2. PHP (Practical)

Max. Marks: 100 External: 100

### -Introduction to PHP

Set up PHP, Variables, Echo/Print, Data Types, Strings, Constants, Arrays, Functions, Super globals

PHP Advanced: Multiple Arrays, Date and Time, Include files, File Handling, File Open/Close/Read, Cookies and Sessions.

### -PHP Forms

Working with HTML forms, Form Handling, Form Validation, Form Required

#### -Introduction to Database

Creating Database, Insert Data into PHP, Create Tables, Insert Multiple data, Select Data, Delete Data, Update Data, Limit Data.

Use any platform to create Database like MS-Access, MySQL etc.

#### 3. DREAM WEAVER

Max. Marks: 100 External: 100

#### **Introduction to Dream weaver**

• Introduction, Overview, Work area, Window Menu, Floating Palettes, Document, Window, Customizing Launcher, Status Bar Preferences, Property Inspector, Object Palette, Invisible Elements, History Palette, Context Menu

#### **Sites & Documents**

- Site Planning, Planning Templates & Library Use, Local Site Creation, Editing & updating a Web site, Viewing Sites, Working with Site Files, Adding Text & objects,
- Formatting Text Overview, Special Character, Selecting Elements, Invisible Elements, Choosing Colours, Web Safe Colours, Automatic Task, Recording Commands, Head Content, Meta Properties, Description Properties

# **Linking & Navigation**

- Linking & Navigation View, Document Location & Paths, About Absolute Paths
- Post Relative Paths, Linking to a Document, Creating an E-Mail Link, Creating Jump
- Menus, Editing Jump Menus, Creating Navigation Bars, Viewing Site Structure, Managing
- Links, Testing Links

## **Site Management**

- Overview, Setting Up Remote Site, Determining the Remote Sites Root Directory, Site
- Window, FTP Preferences, Getting & Putting Files, Getting Files from The Remote
- Server, Synchronizing the Files, HTML source searches, Saving Search Patterns, Sites for Multiple Browser, Previewing in Browser, Design Notes.

#### **Formatting Text**

• Formatting Text, Applying Paragraphs & Heading Tags, Changing Font, Characteristics, Changing color of Text, Alignment Text & Documents, Text Properties, Creating Lists, List Properties, Using HTML Style Sheets, CSS Style Sheets, Checking Spellings

#### **Images**

- Images, Inserting An Image, Image Properties, Aligning Elements, Resizing. Imaging
- & Other Elements, Practical Image Editor, Creating Rollover, Working with Fire
- Works, Creating Image Maps, Setting Hotspot Properties

#### **Tables**

• Tables Overview, Inserting Tables, Adding Content to a Table Cell, Importing Data, Selecting Table Elements, Preset Design in Table Elements, Copying & Pasting Cells, Resizing Tables & Cells, Changing Column Widths, Sorting Tables, Exporting Table Data

#### Layers

Creating Layers, Layer Preferences, Layer Properties, Setting Properties for, Multiple
Layers, Manipulating Layers, Changing Layer Visibility, About Timelines,
Frame Numbers, Playback Options, Creating Timeline Animations, Using Multiple
Timelines, Copying & Pasting Animations

#### Frames:

- Frames Overview, Creating Frames, Creating Frameset, Deleting Frames, Flame
- Inspector, Saving Frame & Frameset Files, Frameset Properties, Naming a Frameset
- Documents, Borders, Creating NOFRAMES Content

#### **Inserting Media:**

Media Overview, Practical Media Editor, Inserting Shockwave Movies, Inserting Flash
Movies, Flash Movies Properties, Inserting & editing after shock objects, Inserting
Generator object, Navigator plug in properties, Playing Plug ins, ActiveX Properties,
Inserting Java Applets

#### **Behavior:**

Behavior Inspector, About Events, Attaching Behavior to Timeline, Creating New Actions,
 Call Java Script, Change Property, Check Browser, Check Plug In, Control Shock wave or Flash, Drag layer, Jump Menu, Pre load images, Swap image

# **Editing HTML:**

- Inserting HTML mode, Editing Tag Mode, Rap Tag Mode, The Hints Menu, Quick Tag Editor Preferences, HTML format Preferences, HTML Rewriting Preferences, HTML color Preferences, Cleaning up HTML, Using Practical HTML editor, Inserting
- Scripts, Inserting Comments

### Forms:

Creating Forms, Adding Objects to Form, Text field properties, Button properties,
 Image Fields, Check Box, List Menu, Radio Buttons, File Fields, Generic Fields,
 Processing Forms

### 4. FILM APPRECIATION-II

**Time: 3 Hours** 

Max.Marks:100 Theory:50 Practical: 50

#### **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **Section A**

- 1. The Motion Picture Industry (Indian)
  - a) Production & Distribution
  - b) Censorship
  - c) Art and Technique of Motion pictures

#### **Section B**

- 2. Production Manipulation
  - i) Script
  - ii) Actors
  - iii) Sets
  - iv) Costumes
  - v) Aspect Ratio
  - vi) Film Stock

#### **Section C**

- 3. Manipulation during Filming
  - i) Lenses
  - ii) Camera Distance & Position
  - iii) Composition
  - iv) Camera movement
  - v) Lighting
  - vi) Sound

# **Section D**

- 4. Postproduction Manipulation
  - i) Processing and Printing
  - ii) Editing
  - iii) Special effects
  - iv) Music
  - v) Sound Effects
  - vi) Post Synchronization or dubbing

# 5. PROJECT-II

Max. Marks: 100 External: 100

Project should be completed on the basis all the software covered during the semester

### 6. (ESL-221): ENVIRONMENTAL STUDIES

Time: 3 Hrs. Max. Marks: 100

**Teaching Methodologies** 

The Core Module Syllabus for Environmental Studies includes class room teaching and field work. The syllabus is divided into 8 Units [Unit-1 to Unit-VII] covering 45 lectures + 5 hours for field work [Unit-VIII]. The first 7 Units will cover 45 lectures which are class room based to enhance knowledge skills and attitude to environment. Unit-VIII comprises of 5 hours field work to be submitted by each candidate to the Teacher in-charge for evaluation latest by 15 December, 2019.

**Exam Pattern: End Semester Examination-75 Marks** 

Project Report/Field Study- 25 Marks [based on submitted report]

Total Marks- 100

The structure of the question paper being:

**Part-A**, Short answer pattern with inbuilt choice **– 25 Marks** Attempt any five questions out of seven distributed equally from Unit-1 to Unit-VII. Each question carries 5 marks. Answer to each question should not exceed 2 pages.

**Part-B**, Essay type with inbuilt choice **– 50 Marks** Attempt any five questions out of eight distributed equally from Unit-1 to Unit-VII. Each question carries 10 marks. Answer to each question should not exceed 5 pages.

#### **Project Report / Internal Assessment:**

#### Part-C, Field work – 25 marks [Field work equal to 5 lecture hours]

The candidate will submit a hand written field work report showing photographs, sketches, observations, perspective of any topic related to Environment or Ecosystem. The exhaustive list for project report/area of study are given just for reference:

- 1. Visit to a local area to document environmental assets: River / Forest/ Grassland / Hill / Mountain / Water body / Pond / Lake / Solid Waste Disposal / Water Treatment Plant / Wastewater Treatment Facility etc.
- Visit to a local polluted site Urban / Rural / Industrial / Agricultural
- 3. Study of common plants, insects, birds
- 4. Study of tree in your areas with their botanical names and soil types
- 5. Study of birds and their nesting habits
- 6. Study of local pond in terms of wastewater inflow and water quality
- 7. Study of industrial units in your area. Name of industry, type of industry, Size (Large, Medium or small scale)
- 8. Study of common disease in the village and basic data from community health centre
- 9. Adopt any five young plants and photograph its growth
- 10. Analyze the Total dissolved solids of ground water samples in your area.

  11. Study of Particulate Matter (PM<sub>2.5</sub> or PM<sub>10</sub>) data from Sameer website. Download from Play store.
- 12. Perspective on any field on Environmental Studies with secondary data taken from Central Pollution Control Board, State Pollution Control Board, State Science & Technology Council

#### Unit-I

# The multidisciplinary nature of environmental studies

Definition, scope and importance, Need for public awareness

(2 lectures)

#### Unit-II

#### Natural Resources: Renewable and non-renewable resources:

Natural resources and associated problems.

- (a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
- (f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
  - Role of an individual in conservation of natural resources.
  - Equitable use of resources for sustainable lifestyles.

(8 Lectures)

#### **Unit-III**

### **Ecosystems**

- Concept of an ecosystem
- Structure and function of an ecosystem
- Producers, consumers and decomposers
- Energy flow in the ecosystem
- Ecological succession
- Food chains, food webs and ecological pyramids
- Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

(6 Lectures)

#### **Unit-IV**

## **Biodiversity and its conservation**

- Introduction Definition: genetic, species and ecosystem diversity
- Biogeographical classification of India
- Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values
- Biodiversity at global, national and local levels
- India as a mega-diversity nation
- Hot-spots of biodiversity

- Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts
- Endangered and endemic species of India
- Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

(8 Lectures)

#### Unit-V

#### **Environmental Pollution:**

#### **Definition:**

- Causes, effects and control measures of Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution
- Solid waste management: Causes, effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution
- Pollution case studies
- Disaster management: floods, earthquake, cyclone and landslides

(8 Lectures)

#### **Unit-VI**

#### Social Issues and the Environment

- From unsustainable to sustainable development
- Urban problems and related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case studies.
- Environmental ethics: Issues and possible solutions
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation
- Consumerism and waste products
- Environmental Protection Act, 1986
- Air (Prevention and Control of Pollution) Act, 1981
- Water (Prevention and control of Pollution) Act, 1974
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

(7 Lectures)

#### **Unit-VII**

#### **Human Population and the Environment**

- Population growth, variation among nations
- Population explosion Family Welfare Programmes
- Environment and human health
- Human Rights
- Value Education
- HIV / AIDS

- Women and Child Welfare
- Role of Information Technology in Environment and Human Health
- Case Studies

(6 Lectures)

#### **Unit-VIII**

#### Field Work

- Visit to a local area to document environmental assets River / forest / grassland / hill / mountain
- Visit to a local polluted site Urban / Rural / Industrial / Agricultural
- Study of common plants, insects, birds
- Study of simple ecosystems-pond, river, hill slopes, etc

(Field work equal to 5 lecture hours)

#### **References:**

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- 2. Down to Earth, Centre for Science and Environment, New Delhi.
- 3. Heywood, V.H. & Waston, R.T. 1995. Global Biodiversity Assessment, Cambridge House, Delhi.
- 4. Joseph, K. & Nagendran, R. 2004. Essentials of Environmental Studies, Pearson Education (Singapore) Pte. Ltd., Delhi.
- 5. Kaushik, A. & Kaushik, C.P. 2004. Perspective in Environmental Studies, New Age International (P) Ltd, New Delhi.
- 6. Rajagopalan, R. 2011. Environmental Studies from Crisis to Cure. Oxford University Press, New Delhi.
- 7. Sharma, J. P., Sharma. N.K. & Yadav, N.S. 2005. Comprehensive Environmental Studies, Laxmi Publications, New Delhi.
- 8. Sharma, P. D. 2009. Ecology and Environment, Rastogi Publications, Meerut.
- 9. State of India's Environment 2018 by Centre for Sciences and Environment, New Delhi
- 10. Subramanian, V. 2002. A Text Book in Environmental Sciences, Narosa Publishing House, New Delhi.

# $B.DESIGN\left(MULTIMEDIA\right)\left(SEMESTER\ SYSTEM\right)$

# **SEMESTER-V:**

Sr. No.	Course	Total Marks	External Assessment	Time Allowed
1.	Adobe Premiere Pro	Theory 50 Practical 50	50	3 Hrs. 6 Hrs.
2.	Adobe After Effects	Theory 50 Practical 50	50	3 Hrs. 6 Hrs.
3.	Workshop-III	Practical 50	50	6 Hrs.
4	Sound Editing and Recording	Practical 100	100	6 Hrs.
5	Technical Theory of Media – II (Electronic Media)	Theory 100	-	3 Hrs.
6.	Project-III	Practical 150	150	6 Hrs.

**Total Marks: 600** 

#### 1. ADOBE PREMIERE PRO

Time: 3 Hours Max. Marks: 100

Theory: 50 Practical: 50

#### **Instructions for Paper–Setters:**

Section A: (10 Marks): It will consist of 8 very short answer type questions. Candidates will be

required to attempt any 5 questions, each question carrying 2 marks.

**Section B:** (20 Marks): It will consist of 7 long answer type questions. Candidates will be

required to attempt any 4 questions, each question carrying 5 marks.

**Section C:** (20 Marks): It will consist of 4 Essay type questions. Candidates will be required to

attempt any 2 questions, each question carrying 10 marks.

#### INTRODUCTION

• Nonlinear editing in Adobe Premiere Pro

Workflow

Interface

# CREATING A NEW PROJECT & THE WORKSPACE

- Starting a New Project
- Setting up a Sequence
- Exploring Preference Settings
- Arranging Your Workspace
- Studying the Project Panel
- Exploring the Program & Source Panels
- Reviewing the Media Browser, Info, Effects & History Panels

#### **IMPORTING ASSETS**

- Capturing Video & Logging Clips
- Importing Media into the Project Panel
- Organizing the Project Panel
- Importing Photoshop Files

#### THE TIMELINE PANEL & SEQUENCE

- Placing Clips from the Project Panel
- Placing Clips from the Source Panel
- Embedding Sequences

### **DESIGNING & INSERTING TITLES**

- Using & Creating Styles with the Title
- Templates & Lower Thirds
- Creating Text on a Path & Working with Masks
- Creating Rolling & Crawling Titles

#### **ADDING AUDIO & EXPORTING FILES**

- Adding Audio to a Project
- Exporting a Project

### **EDITING VIDEO**

- Editing Video in the Timeline Panel
- The Ripple & Rolling Edit Tools
- The Slip & Slide Tools
- Trimming Clips in the Source Panel
- The Rate Stretch Tool
- Time Remapping

#### APPLYING VIDEO TRANSITIONS

- Setting & Applying Default Transitions
- Working with Transitions
- Adjusting Transition Settings in the Effect Controls Panel

# **ADVANCED EDITING & VIDEO EFFECTS**

- Converting Video Formats with Adobe Media Encoder
- Stabilizing Shaky Footage
- Adjusting Motion & Opacity
- Applying Color Correction
- Using Adjustment Layers

# **WORKING WITH AUDIO**

- Studying the Basics of Editing with Audio
- Recording a Narration with the Audio Mixer
- Transcribing Speech

### **EXPORTING THE FINAL PROJECT**

- Using the Project Manager
- Exporting Media
- Working with Adobe Media Encoder
- Credits

### AUTHORING DVDs WITH ADOBE ENCORE

#### 2. ADOBE AFTER EFFECTS

Time: 3 Hours Max. Marks: 100

Theory: 50

Practical (External): 50

**Instructions for Paper–Setters:** 

**Section A:** (10 Marks): It will consist of 8 very short answer type questions. Candidates will be

required to attempt any 5 questions, each question carrying 2 marks.

**Section B:** (20 Marks): It will consist of 7 long answer type questions. Candidates will be

required to attempt any 4 questions, each question carrying 5 marks.

**Section C:** (20 Marks): It will consist of 4 Essay type questions. Candidates will be required to

attempt any 2 questions, each question carrying 10 marks.

- Introduction to After Effects
  - Setting up a project
  - Creating a project
  - Importing footage Item
  - Opening & closing a project
  - Saving a project
- Importing media
  - File formats supported for import in After Effects
  - O Preparing still image file for import into After Effects
  - Using interpretation rules
  - Importing image containing alpha channel
  - Importing layered adobe Photoshop files
  - Importing layered Adobe illustrator files
- Working with imported footage
  - o Introducing the switch columns
  - o Seeing & hearing A/V panel
  - o Global composition switches
  - o Flipping switches in the switches panel
  - o Finding the hidden panel
  - o Knowing the time graph
  - o Changing position
  - o Changing scale
  - o Changing degree of rotation
  - o Adjusting the anchor point
  - o Fading opacity
  - o Modifying motion path
  - o Understanding key frame
  - Setting key frames
  - o Moving & copying key frames
  - o Setting & animating a layer property in timeline window
  - Setting & animating anchor point
  - o Setting & animating mask property
  - o Modifying mask
  - o Putting mask in motion
  - o Using mask with effects
- Composition setting
  - o Setting general preferences
  - o Setting import preferences
  - o Setting output preferences

- o Setting grid & guides preferences
- O Setting label colors & label defaults preferences
- O Replacing & substituting footage
- O Nesting a composition
- Creating mattes
  - Understanding transparency
  - O Working with tracks matte
  - O Using layer's alpha channel as a track matte
  - O Using layer's luminance as a track matte
  - Inverting mattes
  - O Using the preserve transparency switch
- Transform modes
  - o Using add
  - Using multiply
  - Using Screen
  - Using overlay
  - Using soft light
  - Using hard light
  - O Using color dodge & color burn
  - O Using darken & lighten
  - O Using exclusion & difference
  - O Using hue, saturation, color & luminosity
  - O What is interpolation
  - O Controlling change through interpolation
  - Interpolation method
  - O Changing speed of a layer
  - O Using time reverse key frame assistant
  - O Time stretching a layer
  - O About time remapping
  - O Reversing the playback direction of a layer
- Working with render queue
  - o About rendering
  - O Using the render queue window
  - O Changing render settings
  - O Saving a RAM preview as a rendered movie
  - Choosing compression potion
- Using effects
  - o Using all standard effect (adjust, audio, blur, sharpen, channel etc.)
  - o Particles
  - o What is particle
  - o Understanding the particle playground effect

- Working with text
  - Working with text filter
  - o Using basic text
  - o Using the number filters
  - o Using path text effect
  - o Working with mask in text layer
  - Working with 3D composition
    - o Introduction to 3D
    - o Adjusting 3D layer's position & rotation
    - o Animating in 3D
    - o Adding camera & light to 3D
    - o Working with virtual camera
    - o Understanding 3D auto orientation
    - o 3D rendering
- Expression
  - o Introduction to expression
  - o Expression icon
  - o Converting expression to key frame
  - o Creating & editing expression
  - o Working with layer & time in expression
  - o Controlling expression by using effect controls
- Working with audio
  - o Editing audio levels
  - Using standard audio effects (backward, bass, treble, delay, flange, chorus, reverb etc)
- Project

#### 3. Workshop-III

Max. Marks: 50 External: 50

#### **Pre-Production:**

Script writing, Storyboard, Budgeting, Location, staffing, Planning Film stock, Frame rate, Equipment etc.

#### **Production:**

Camera preparation (frame rate, shutter speed, shutter angle, white/black balance, Monitor, Back focus, cables, accessories. as a speed, tonal range, lighting ratio, Lighting according to monitor. Highlights, shadows and exposure.

## **Understanding camera:**

Camera head, Body, Frame rate and scanning on board vtr, mechanics, operation, Formats, Image control, Shutter, output, accessories.

#### Lenses:

Resolution, contrast, breathing, Focus, depth of field, filters, aperture.

**Monitor:** Introduction, Lining up with color bars, exposure meter, cabling color balance: white/Black balance using grey cards, Nd filters,

### **Project:**

Recording 1/2 hr movie (footage)

#### **Post Production:**

Off line / on line editing, Recording and editing music voice over for movie. Mixing.

#### 4. SOUND EDITING AND RECORDING

Max. Marks: 100 External: 100

## **Sound Forge**

- Introduction to audio
  - o Opening a file
  - o Closing a file

  - Saving a fileExtracting audio from CDs
- Working with video
  - Attaching & detaching a video
  - o Show & hide video strip
  - o Display frame number
  - o Recording
  - Monitor input levels
  - o Choose an input device & adjust levels
  - o Adjust for DC offset
  - o Recording a specific length
- Selection of data
  - o Select data using the set selection dialog
  - o Mark in and mark out of a selection
  - o Select data using the keyboard
  - o Set selection snapping
  - o Move the cursor to a specific position
  - o Make a selection
  - o Adjust the length of a selection
  - o Shift a selection left or right
  - o Region list
  - o Play list / cutlist
  - o Snap to time
  - o Snap edge to time
  - o Snap to zero
  - o Snap edge to zero
  - o Automatically snap to time
  - o Automatically snap to zero
- Basic editing
  - o Select an editing tool
  - o Cut selected data
  - o Play the content of the clip board
  - o Paste data from the clipboard
  - o Clear selected data
  - o Paste multiple copies of the clipboard contents
  - Trim/ crop all data in a window except the current selection
  - o Repeat an edit operation

- Markers, regions & commands
  - o Inserting a marker
  - o Inserting a region
  - o Convert marker to region
  - o Create region automatically
  - o Extract region to new files
  - o Replicate marker & regions
  - o Delete marker & regions
  - o Clear all marker or regions from a file
- Working with effects
  - o Acoustic mirror
  - o Amplitude modulation
  - o Chorus
  - o Delay / echo
  - o Distortion
  - o Dynamic
  - o Envelope
  - o Flange/wah-wah
  - o Crapper/snipper
  - o Noise gate
  - o Pitch
  - o Reverb
  - o Vibrate
  - o Wave hammer
- Working with processes
  - o Auto trim/crop
  - o Bit-depth converter
  - o Channel converter
  - o DC offset
  - o EQ
  - o Fade
  - o Insert silence
  - o Invert / flip
  - o Mute
  - o Normalize
  - o Pan / expand
  - o Resample
  - o Reverse
  - o Smooth/ enhance
  - o Swap channel
  - o Time stretch
  - o Volume

- Sampling Sound
  - o Using the loop tuner
  - o Cross fading a loop
  - o MIDI note & frequencies
  - o Introducing sound data
- MIDI synchronization
  - o Introduction to MIDI
  - o Using MIDI triggers
  - o Configure an internal or external MIDI controller
  - o Assign sound forge events to MIDI triggers
  - o Setting MIDI / synchronization preferences
  - o Acoustic mirror
  - Wave hammer

# **Introduction to Stienberg Cu-Base**

- o Interface
- o Toolbars
- o Effects Channels
- o Lanes & Tracks
- o Solo
- o Loop
- o Effects
- o Equaliser
- o Mixer
- o MIDI Recording

## **5. TECHNICAL THEORY OF MEDIA –II (ELECTRONIC MEDIA)**

Max. Marks: 100 Theory: 100

# **Instructions for Paper–Setters:**

Time: 3 Hours

**Section A:** (20 Marks): It will consist of 12 very short answer type questions. Candidates will be required to attempt any 10 questions, each question carrying 2 marks.

**Section B:** (20 Marks): It will consist of 7 long answer type questions. Candidates will be required to attempt any 4 questions, each question carrying 5 marks.

**Section C:** (60 Marks): It will consist of 5 Essay type questions. Candidates will be required to attempt any 4 questions, each question carrying 15 marks.

- Evaluation and Growth of Electronic Media (Radio, TV)
- Characteristics of Various Electronic Media (Radio, TV)
- Radio vs. TV
- Print vs. Electronic Media
- Effect of Electronic Media on Culture and Society
- Broadcasting Writing Technique and Style
- Script Formats
- Editing
- Principles of Video Production
- Basic TV Production Techniques
- Production Team
- Camera Crew
- Types of Cameras
- VHS U-matic, Betacam, High Eight, DVC
- Budgeting
- Channel Analysis, Media Appreciation Film review
- Distribution of Films
- Editing Softwares Adobe Premiere, After Effects, Sound Forge.

# 6. PROJECT-III

Max. Marks: 150 External: 150

Project should be completed on the basis all the software covered during the semester

# $B.DESIGN\left(MULTIMEDIA\right)\left(SEMESTER\ SYSTEM\right)$

# **SEMESTER – VI:**

Sr. No.	Subject	Total Marks	External	Time Allowed
1	3D Studio Max	Practical 100	100	6 Hrs.
2	Introduction to 3D	Theory 100	-	3 Hrs.
3	Drawing & Illustration	Practical 100	100	6 Hrs.
4	Workshop–IV: (Stop Motion)	Practical 100	100	6 Hrs.
5	Blender	Theory 50 Practical 50	50	3 Hrs. 6 Hrs.
6	Project – IV	Practical 100	100	6 Hrs.

**Total Marks: 600** 

# 1. 3D Studio Max (Practical)

Max. Marks: 100 External: 100

- Introducing 3d Max
  - o What Is 3d
  - o About 3ds Max
  - o How's Max Developed
  - o System Requirements
  - o About 3–D Graphics
  - o How 3–D Graphics Are Used
  - o Finding A Career In 3d
  - o Simulating Three Dimension
- Exploring View Ports
  - o Understanding 3d Space
  - o Orthographic Views
  - o Perspective View
  - o View port Controls
  - View port Rendering Levels
  - View port Configuration
  - Meeting The Max Interface
    - o Command Panels
      - The Create Panels
      - The Modify Panels
      - The Hierarchy Panel
      - The Motion Panel
      - The Display Panel
      - The Utility Panel
    - o The Main Toolbar Options
      - Learning The Toolbar Contents
      - Selection Tool
      - Transform Tool
      - Other Toolbar Options
  - Using Primitives & Splines
    - o 3d Primitives
    - Extended Primitives
    - o 2d Primitives
  - Selection & Transform Tools
    - Selection Methods
    - o Groups

- Transform Tools
  - Using Transform Buttons
  - Working With The Transform Gizmo
  - Using Transform Type–Ins
  - Constructing The Transform
  - Understanding A Coordinate System
- Pivot Points
  - Temporary Pivot Points
  - Temporary Pivot Points And Sub Object
  - True Pivot Point
  - Positioning And Aligning Pivot Point
  - Transform Adjustments
- o Using The Align Command
- o Using Grids
- Cloning Objects And Object Arrays
  - Cloning Basics
  - o Shift Clone Method
  - o Array Tool
    - Linear Array
    - Circular Array
    - Spiral Array
- Grouping And Linking Objects
  - Grouping Objects
    - Ungrouping Objects
    - Attaching And De–Attaching Objects
  - o Relationship Between Parent, Chills & Root Relationships
    - Linking & Unlinking Objects
    - Links & Hierarchies
  - o Displaying Links In The View Port
  - Viewing Hierarchies
  - Working With Linked Objects
    - Selecting Hierarchies
    - Linking To Dummies
  - Using Schematic View Window
    - Schematic View Window
    - Schematic View Interface
    - Working With Schematic View Nodes
      - Creating A Hierarchy
      - Rearranging Nodes
      - Deleting Nodes
      - Node Colors
      - Changing The Object Color
      - Copying & Recording Modifiers

- Modeling With Modifiers
  - o Modifiers & The Modifier Stack
  - Basic Axial Modifier
    - Bend
    - Taper
    - Twist
    - Stretch
    - Squeeze
    - Push
    - Mirror
    - Skew
  - Noise
  - Relax
  - o Ripple & Wave
  - Slice & Cap Holes
  - o Spherify & Lattice
  - Mesh Optimization
  - o The Displace Modifiers
  - o Free Form Deformations
  - Spline Based Modifiers
    - Extrude
    - Bevel
    - Lathe & Fillet/ Champher
    - Using Spline Boolean Operations
- Mesh Level Modeling
  - o Choosing A Modeling Method
  - Mesh Basics
  - Polygonal Mesh Modeling
  - Modeling With Primitives
  - Modeling Using Modifiers
    - Modeling A Display Case With Lattice Modifier
    - Modeling A Landscape With The Displace Modifier
  - Modeling Meshes From Lazier Splines
  - Modeling With Compound Object
  - o Editable Poly Modeling
  - Mesh Sub Object Editing
  - o The Vertex Sub Object Level
- Patch Modeling
  - Introduction To Patch Grid
  - Building & Editing Patch Surfaces
    - Creating Patches
    - Shaping Patches
    - Adding New Patches
    - Extruding Patches
    - Extrude Edge On Patches
    - Attaching & Welding Patch Surface

- Converting A Loft Object To Patch
- o Compound Object
- Types Of Compound Object
  - Boolean Objects
  - Spline Boolean
  - Morphing Objects
  - Creating Conform Object
  - Shape Merge
  - Terrain Object
  - Loft Objects
  - Scatter
  - Mesher
- Working With Nurbs
  - o Nurbs Curves & Surfaces
  - o Non Uniform Rational B-Spline (Nurbs)
  - Adaptive Tessellation
  - Using Nurbs For Organic Modeling
  - o Working With Nurbs Curves
  - Working With Nurbs Surfaces
  - Nurbs Modeling Technique
  - o Converting A Mesh Primitive To Nurbs
  - o Understanding Isoparms
  - Using Nurb Tools
    - Making A U Loft Surface From Curve
    - Capping A Surface
    - Drawing A Curve On Surface
    - Trimming A Surface
    - Modeling A Character's Head With Nurbs
    - Lathing A Nurbs Surface
    - Lofting Surfaces
- Radiocity
- Basic Mapping & Material
  - What Is Material
  - o Material In 3d Computer Graphics
  - o Understanding The Structure Of Materials
    - Understanding Color Models
    - Components Of Surface Shading
    - Shading Types
    - Basic Shading Parameters
  - Understanding Materials & Maps
    - Material & Map Browser
    - Material Tree
    - Material Type

- Material Channels
- Map Type
  - Bitmap
  - 2d Procedural Maps
  - 3d Procedural Maps
  - Color Modifying Maps
  - Special Maps
  - Reflection & Refraction Maps
- Mapping Coordinates
  - Adjusting Mapping Coordinates In Coordinate Rollout
  - The UVW Map Modifiers
  - Using Unwrap UVW To Change Mapping
- o Exploring The Material Editor Interface
- o Map Rollout
- Advanced Materials
- Advanced Material Setting
- o Supes Sampling Rollout
- o Dynamics Properties Rollout
- Output Curver For Maps
  - Ray Tracing
  - Applying a Mattel Shadow Material
  - Applying a Double Sided Material
  - Applying Top/ Bottom Material
  - Applying a Shellec Material
  - Applying Map to Material Channel
- Working With Lights
  - o Art Of Lighting
  - o Basics Of Lightning
  - o Simulation And Color In 2d
  - o Types Of Light & Their Parameters
  - Lightning In Computer Graphics
    - Diffuse Reflection
    - Ambient Light
    - Shadow Casting
    - Inclusion & Exclusion of Objects
  - o Designing Your Lighting
    - A Three Point Lightning Setup
    - Applying Three Point Lighting
    - Adding Volume Light Atmospheric
    - Zone Lighting
    - Mood Lighting
    - Applying Mood Lighting
    - Lighting Free Camera
    - Using Vertex Color To Replace Lighting

- Using Camera
  - o Understanding camera & Camera types
  - o Using free camera
  - o Using target camera
  - o Camera parameters
  - o Controlling camera
  - o Dollying the camera
  - o Rooling the camera
  - o Trucking the camera
  - o Orbiting the camera
  - o Panning the camera
  - Adding multi–pass effect
  - Depth of field
  - Motion blur
- Animation
  - o Using keys
  - o Managing keys in track view
  - o Using animation button
  - o Setting frame rate
  - Setting speed & direction
  - Track bars
  - Track view modes
    - Edit key mode
    - Edit time mode
    - Edit range mode
    - Position ranges mode
    - Function curves mode
  - Motion panel
  - Animation Parameters
    - Animating a single parameters
    - Animating a modifiers parameters
    - Animating light parameters
    - Animating material parameter
    - Animating modifier parameter
  - o Animating with space warps
  - o Animating particles
  - o Making the particles follow a path
  - o Adding a deflector space warp
  - o Morphing
- Using controllers
  - Assigning controllers
  - o Assigning controllers in motion panel & track view
  - Setting default controllers

- Using Particles
  - Creating particles
  - Types of particles
  - o Particles basic parameters
  - o Particles generation rollout
- Using Space Warps
  - o Creating space warps
  - o Binding space warp to an object
  - o Types of space warp
    - Forces
    - Deflectors
    - Geometrical / deformable
    - Modifier based
    - Using video post
    - Understanding video post
      - Editing video post
      - Video post queue
      - Video post events
      - Video post panels
- Dynamic Simulation
  - o Understanding dynamic
  - o Using dynamic space warps
  - Using dynamic rollout
  - o Editing simulation objects
  - Using flex modifier
  - o Adding forces & deflectors
- Adding Collision
- Rendering
  - Rendering animation
  - o Output size & other options
  - o Rendering few part of the scene
  - Motion blur
  - Antialiasing
  - Render type
  - o Common parameters
  - o Render preview
  - Action spade
- Environment & Render Effects
  - o Render effects
  - o Lens effect
  - o Glow, ring, blur etc.
  - o Creating an environment
  - Adding atmospheric effect
  - o Fog, cloud, fire etc.

- Working with bones
  - o Building bones system o
  - Assigning an IK solver o
  - Setting bone parameter o
  - Using skin modifiers
  - o Editing envelops
  - o Using deformers
- Using inverse kinematics
  - o Creating IK system
  - o Building & linking a system
  - o Defining joint constraints
  - o Copying, pasting & mirroring joints
  - o Binding objects
  - o IK limb solver
  - o IK methods
  - o IK script

# **Project:**

- Assignment 1 Modeling
- Assignment 2 Animation (i.e. Walkthrough, Camera animation etc.)

#### 2. INTRODUCTION TO 3D

Max. Marks: 100

Time: 3 Hours Theory: 100

# **Instructions for Paper–Setters:**

**Section A:** (20 Marks): It will consist of 12 very short answer type questions. Candidates will be required to attempt any 10 questions, each question carrying 2 marks.

**Section B:** (20 Marks): It will consist of 7 long answer type questions. Candidates will be required to attempt any 4 questions, each question carrying 5 marks.

**Section C:** (60 Marks): It will consist of 5 Essay type questions. Candidates will be required to attempt any 4 questions, each question carrying 15 marks.

# **Introduction to the 12 Basic Principles of Animation**

- Squash and Stretch
- Anticipation
- Staging
- Straight ahead action and pose to pose
- Follow through and overlapping action
- Slow in and Slow out
- Arcs
- Secondary Action
- Timing
- Exaggeration
- Solid Drawing
- Appeal

#### What is 3D

- Application of 3D Graphics and Animation
- Difference between 2D Workspace and 3D Workspace
- Skills set required

### **Understanding Viewports**

- Understanding 3D Space
- Different Viewports in 3D
- Role of Perspective View
- Configuring Viewport

### **Techniques in 3D**

• Streams-Modelling, -Rigging, - Texturing, -Lighting, -Animation, -Dynamics, - Rendering

- Choosing a Modelling Method: Nurbs Modelling, Spline Modelling, Polygon Modelling, Patch Modeling, Subdivs
- Choosing a Rigging Method: Inverse Kinematic (IK), Forward Kinematics (FK)
- Choosing a Texturing Method: UV Mapping and Unwrapping
- Choosing a Lighting Method: Scan line, Mental Ray.
- Using Primitives 3D Primitives, Extended Primitives, 2D Primitives

### **Selection and Transform Tools**

- Transform tools
- Working with Gizmo
- Using the Transform Tools
- Co–ordinate System

#### **Pivot Points**

- True Pivot
- Temporary Pivot

### **Cloning Objects**

- Cloning basics
- Array Tool

#### **Modifiers**

- Bend
- Taper
- Twist
- Stretch
- Squeeze
- Mirror
- Skew
- Turbo smooth
- Symmetry
- Mesh Optimization
- Spline based modifiers
- Free Form deformations

### **Compound Objects**

- Boolean Objects
- Spline Boolean
- Morphing Objects
- Creating Conform Object
- Shape Merge
- Terrain Object
- Loft Objects
- Scatter
- Mesher

# **Map Types**

- Bitmap
- 2D Procedural Map
- 3D Procedural Map
- Color Modifying Map
- Refraction and Reflection Maps
- Opacity Maps

# **Mapping Attributes**

- UVW map
- Material Editor
- Map Rollout

# **Lighting in 3D Software**

- Art of Lighting
- Basics of lighting
- Three Point lighting basic
- Zone lighting
- Mood Lighting
- Accent Lighting
- Types of lights and their properties

# Camera in 3D

- Understanding the camera and camera types
- Free camera
- Target camera
- Camera parameters
- Controlling Camera
- Dollying the Camera
- Rolling the Camera
- Trucking the Camera
- Orbiting the Camera
- Panning the Camera
- Adding Multi-Pass effect in the camera
- Depth of Field
- Motional Blur

### **Animation in 3D**

- Using Animation key frames
- Frame Rate
- Morphing
- Auto Key and Set Key Attributes
- Motion Panel
- Dope Sheet
- Trax Editor
- Ghosting
- Simulating Particles
- Video Post

# Rigging

- Creating Bones
- Solvers
- Skin Modifiers
- Using Inverse Kinematics
- Using Forward Kinematics
- Linking
- Physique
- Understanding Biped

### Rendering

- Taking Output
- Formats of Rendering
- Frame Size
- Output type
- Render Preview
- Anti Aliasing

# 3. DRAWING & ILLUSTRATION (Practical)

Max. Marks: 100 External: 100

# a. Drawing:

i. Study of Furniture, Buildings, and Automobiles etc. ii.

Study of objects in wood, Glass, Metal, Fabric etc.

- iii. Drawing of 3D objects from 4 different views (Top, Front, Side view & Perspective)
- iv. All above assignments to be done in any one medium.

#### **b.** Illustration:

- i. Introduction to Illustration
- ii. Different styles of Illustration
- iii. Exaggerated, Flat, Stylish & Realistic etc.

Story Narration through Illustration

# 4. WORKSHOP-IV (STOP MOTION)

Max. Marks: 100 External: 100

Camera Capturing Techniques

Camera Angle

Frame by frame shoot

Editing

Sequence Edit and Composite in Video and Composting softwares

Render

# 5. BLENDER (THEORY) (PRACTICAL)

Max. Marks: 100

Time: 3 Hours Theory: 50

Practical (External): 50

## **Instructions for Paper–Setters:**

**Section A:** It will consist of 8 very short answer type questions. Candidates will be required to attempt any 5 questions, each question carrying 2 marks. (10 Marks)

**Section B:** It will consist of 7 long answer type questions. Candidates will be required to attempt any 4 questions, each question carrying 5 marks. (20 Marks)

**Section C:** It will consist of 4 Essay type questions. Candidates will be required to attempt any 2 questions, each question carrying 10 marks. (20 Marks)

#### **Blender Interface**

- Blender screen, 3D window, 3D space
- Navigate save, App Pac Imp

## **Object**

- Create and edit object, Basic Mesh, Join mesh
- Move mesh object, Mesh vertex edit

## **Materials and textures**

- Blender material slots, Material settings, Ramp shaders
- Halos, UV Texture mapping, Displacement mapping, Unwrapping with seams

#### Lighting and camera

• Types of lights, Light settings, Camera settings

#### Rendering

- Render Settings, Rendering image, Creating a video clip
- Raytracing

#### Animation

- Animation basics, Graph editor window, Editing curves
- Curve types, Automatic keyframing

#### 3D Text

- Creating 3D text, Text on curves, Converting to mesh object
- Elefont 3D text

## **Modifiers**

- Modifier stack, Array modifier, Bevel modifier
- Boolean modifier, Mirror modifier, Subdivision surface modifier
- UV project modifier

# **Particle Systems**

- Nomenclature, Particle buttons, Starting a system, Material on particles
- Interaction, Types of particles, Wind

#### **Constraints**

- Constraint stack, Transform, Tracking, Relationships
- Duplicating on curves, Extruding on curves

#### **Armatures**

- Manually assign vertices, Vertex groups, Adding armatures
- Editing bones, Inverse kinematics

#### Fluid Simulation

- Basic setup, Domain object setup, Fluid object setup, Inflow object setup
- Obstacle object setup, Fluid simulation

#### Nodes

- Resize node, Expand & collapse nodes, Connecting & Unconnecting
- Node group, Naming groups, Material nodes
- Texture nodes, Compositing nodes

# **Video Sequence Editing**

• Making a movie, The video editing screen

# $B.DESIGN\left(MULTIMEDIA\right)\left(SEMESTER-VI\right)$

# 6. PROJECT: IV

Max. Marks: 100 External: 100

Project should be completed on the basis all the software covered during the semester

# $B.DESIGN \, (MULTIMEDIA) \, (SEMESTER \, SYSTEM)$

# **SEMESTER-VII:**

Sr. No.	Subject	Total Marks	External	Exhibit Display	Time Allowed
1.	Maya	Theory 100 Practical 200	200	-	3 Hrs. 6 Hrs.
2.	Mudbox	Theory 50 Practical 50	50	-	3 Hrs. 6 Hrs.
3.	Project-V	Practical 200	200	-	6 Hrs.

**Total Marks: 600** 

#### BACHELOR OF MULTIMEDIA (SEMESTER – VII)

## MAYA (THEORY) (PRACTICAL)

Max. Marks: 300 Time: 3 Hours Theory: 100

Practical (External): 200

## **Instructions for the Paper Setters:-**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

#### **Section-A**

## **User Interface of Maya**

- Introduction to Maya
- Modeling Tools
- Abt. View Ports
- Abt. Opening File, Saving and Closing

## **Modeling Tools**

- Nurbs Modeling
- Poly Modeling
- Subdivision Modeling

## **Advance Modeling Technique**

- Product Modeling
- Character Modeling
- Low poly Modeling
- High Poly Modeling

#### Texturing

- About Texturing
- Mapping
- UV Tex editor

## **Materials**

- Anisotropic.
- Blinn.
- Lambert.
- Lavered Shades.
- Ocean Shades.
- Phong.
- Phong E.
- Ramp Shades.
- Shading Map.
- Surface Shades.
- Use Backgrounds.

# BACHELOR OF MULTIMEDIA (SEMESTER - VII)

#### **Section-B**

## Animation

- About Animation.
- About Key Frames.

## **Animation Editors**

- Graph Editor.
- Trax Editor.
- Dope Sheet.
- Blend Shape.
- Expression Editor.
- Device Editor.

## **Set Key**

- Set Breakdown.
- Hold Current Keys.
- Set Driver Key.
- Set Transform Keys.
- Ik/Fk Keys.
- Create Clip.
- Create Pose.

## **Section-C**

## **Ghost Selected**

- Unghost Selected.
- Unghost All.
- Create Motion Trail.
- Create Animation SnapShot.
- Update Motion Trail/Snapshot.
- Create Animated Sweep.
- Motion Paths.

## Skin

- Bind Skin.
- Detach Skin.
- Go To Bind Pose.
- Edit Smooth Skin.
- Edit Rigid Skin.

# BACHELOR OF MULTIMEDIA (SEMESTER - VII)

## **Skeleton**

- Joint Tool.
- Ik Handle Tool.
- Ik Spline Handle Tool.
- Insert Joint Tool.
- Reroot Skeleton.
- Remove Joint.
- Connect Joint.
- Mirror Joint.
- Orient Joint.
- Set Preferred Angle.
- Assume Preferred Angle.
- Enable Ik Handle Snap.
- Enable Ik Fk Control.
- Enable Selected Ik Handle.
- Disable Selected Ik Handle.

## **Section-D**

## Lighting

- Ambient Light.
- Directional Light.
- Point Light.
- Spot Light.
- Area Light.
- Volume Light.
- Camera.
- Camera
- Rendering

#### Cloth

- Create Panel
- Create Garment
- Create Seam
- Create Collision Object

Hypergraph Paint Effects Play blast

#### BACHELOR OF MULTIMEDIA (SEMESTER – VII)

# MUDBOX (THEORY) (PRACTICAL)

Max. Marks: 100

Theory: 50

Practical (External): 50

# **Instructions for the Paper Setters:**

Eight questions of equal marks (Specified in the syllabus) are to be set, two in each of the four Sections (A-D). Questions may be subdivided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each Section. The fifth question may be attempted from any Section.

## **Section-A**

- Time lapse Masking
- Sculpturing Technique

#### **Section-B**

Texturing

**Time: 3 Hours** 

- Lighting technique
- Rendering Technique

#### **Section-C**

- Displacement Map
- Mesh Preparation

#### **Section-D**

- Painting, Drawing
- Painting HDRI
- Vector Art with selection and path in GIMP

#### **Books Recommended:**

- Introducing Mudbox –Ara Kermanikian
- Digital Sculpting with Mudbox: Essential Tools and Techniques for Artists by Mike de la Flor and Bridgette Mongeon
- Maya for Games: Modeling and Texturing Techniques with Maya and Mudbox by Michael Ingrassia

# BACHELOR OF MULTIMEDIA (SEMESTER – VII)

# 3. PROJECT-V

Max. Marks: 200 External: 200

Project should be completed on the basis all the software covered during the semester

# $B.DESIGN \, (MULTIMEDIA) \, (SEMESTER \, SYSTEM)$

# **SEMESTER-VIII:**

Sr. No.	Course	Total Marks	External	Exhibit Display	Time Allowed for Exam	Time Allocation
1.	3D and Animation in Photoshop	Theory 50 Practical 50	50	-	3 Hrs. 6 Hrs.	-
2	Motion Graphics for Commercials	Theory 50 Practical 50	50	-	3 Hrs. 6 Hrs.	-
3.	3D Human Modelling and Animation	Practical 100	100	-	6 Hrs.	-
4.	Industrial Training	300	300			Industrial Training for minimum 10–12 weeks

**Total Marks: 600** 

# 1. 3D AND ANIMATION IN PHOTOSHOP (THEORY) (PRACTICAL)

Max. Marks: 100

Time: 3 Hours Theory: 50

Practical (External): 50

# **Instructions for Paper–Setters:**

**Section A:** (10 Marks): It will consist of 8 very short answer type questions. Candidates will be

required to attempt any 5 questions, each question carrying 2 marks.

**Section B:** (20 Marks): It will consist of 7 long answer type questions. Candidates will be

required to attempt any 4 questions, each question carrying 5 marks.

**Section C:** (20 Marks): It will consist of 4 Essay type questions. Candidates will be required to

attempt any 2 questions, each question carrying 10 marks.

**Section A:** Working with 3D files: 3D file formats, importing 3D objects, working with Mesh

Shadows, DICOM Files

**Section B:** 3D tools in Photoshop: 3D Object Control, 3D Camera control tool, 3D-Axis tool,

Rotate view Tool

Section C: 3D post card, shapes, meshes from 2D grayscale layer, 3D Meshes, Texture, 3D

painting.

Section D: Working with lights, Infinite light, Spot light, Image based light, Point Light

Section E: Animation in Photoshop, 3D timeline Animation, Frame Animation, 3D Render

settings

Section F: Working with third Party Tools: DAZ studio 3D, 3DVIA

# 2. MOTION GRAPHICS FOR COMMERCIALS (THEORY) (PRACTICAL)

Max. Marks: 100

Time: 3 Hours Theory: 50

Practical (External): 50

## **Instructions for Paper–Setters:**

**Section A:** (10 Marks): It will consist of 8 very short answer type questions. Candidates will be

required to attempt any 5 questions, each question carrying 2 marks.

**Section B:** (20 Marks): It will consist of 7 long answer type questions. Candidates will be

required to attempt any 4 questions, each question carrying 5 marks.

**Section C:** (20 Marks): It will consist of 4 Essay type questions. Candidates will be required to

attempt any 2 questions, each question carrying 10 marks.

**Section A:** Motion Graphics in Film and Television: Film Titles, Commercials, Network Branding, Music Videos.

**Section B:** Motion Graphics on Web: Animation Formats on Web, Animation Navigation Webs, Splash Page Animation, Motion in DVD-Video, Digital Signage.

**Section C:** Spatial Transformation, Direction, Frame Mobility.

**Section D:** Animation Process: Frame by Frame Animation, Interpolation, Spatial, Visual and Temporal Interpolation, Coordination Movement

**Section E:** Motion Graphic Compositing: Blend Operations, Keying, Alpha Channels, Mattes, Masks, Nesting and Color Correction.

# 3. 3D HUMAN MODELLING AND ANIMATION (PRACTICAL)

Max. Marks: 100 Practical (External): 100

**Section A:** Anatomy of Human Figure: Proportion, Skeleton, Muscles

**Section B:** Advanced Modelling Technique: Patch Modelling, Splines and NURBS Modelling, Human Face Modelling

Section C: Surfacing and Lighting: Key light, Ambient Light, Fill, Rim or Back Light, Kicker,

Top Light, Bounce Light, Contact Light, Gobos Light

Section D: Storyboarding, Rotoscoping, Walking and Running

**Section E:** Elements of Animation: Pacing and Impact, Action Reaction, Rhythm and Lines of Action, Paths of Action, Cycles, Postures, Emotions, Balance/Imbalance.

# 4. INDUSTRIAL TRAINING

Max. Marks: 300 Practical (External): 300

• Industrial Training for minimum 10–12 weeks