OUTLINES OF TESTS SYLLABI AND COURSES OF READING

FOR

B.Voc.Multimedia ( Graphics & Animation)
I, II and IIIrd Year

Session 2018-19 New Scheme (1st - 6th Semester)
**Scheme of B.Voc. Multimedia**

*(Graphics & Animation)*

*(Semester System)*

<table>
<thead>
<tr>
<th><strong>Semester I</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paper Code</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td><em>GEN-101</em></td>
</tr>
<tr>
<td><em>GEN-102</em></td>
</tr>
<tr>
<td>MGA-103</td>
</tr>
<tr>
<td>MGA-104</td>
</tr>
<tr>
<td>MGA-105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SEMESTER II</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paper Code</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td><em>GEN-201</em></td>
</tr>
<tr>
<td><em>GEN-202</em></td>
</tr>
<tr>
<td>MGA-203</td>
</tr>
<tr>
<td>MGA-204</td>
</tr>
<tr>
<td>MGA-205</td>
</tr>
<tr>
<td><strong>SIT-201</strong></td>
</tr>
</tbody>
</table>

*Refer to Generic Components Common to all B.Voc. Courses*

** Summer Industrial Training of 4-6 weeks in a relevant Industry after 2nd Semester Examinations during summer break. Training report by the student to be submitted within in one week of start of 3rd Semester. Viva-Voce examination to be held within 3-weeks of the start of 3rd semester.

Job Role: Web Designer, 2D Animator, 3d Modeler & Architectural Designer.
**Summer Industrial Training of 4-6 weeks in a relevant Industry after 4th Semester Examinations during summer break. Training report by the student to be submitted within one week of start of 5th Semester. Viva-Voce examination to be held within 3-weeks of the start of 5th semester.**

**Job Role: Java Developer, 3D Animator, VFX Editor.**
**Semester V**

<table>
<thead>
<tr>
<th>Paper Code</th>
<th>Title</th>
<th>Generic/ Skill Component</th>
<th>Theory/ Practical</th>
<th>Internal (Theory)</th>
<th>External (Theory)</th>
<th>Internal (Practical)</th>
<th>External (Practical)</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>*GEN-501</td>
<td>Critical Thinking and Elementary Statistics</td>
<td>Generic</td>
<td>Theory</td>
<td>20</td>
<td>80</td>
<td>--</td>
<td>--</td>
<td>6</td>
</tr>
<tr>
<td>*GEN-502</td>
<td>Cyber Laws</td>
<td>Generic</td>
<td>Theory</td>
<td>20</td>
<td>80</td>
<td>--</td>
<td>--</td>
<td>6</td>
</tr>
<tr>
<td>MGA-503</td>
<td>3D Max Animation</td>
<td>Skill</td>
<td>Practical</td>
<td>--</td>
<td>--</td>
<td>20</td>
<td>80</td>
<td>6</td>
</tr>
<tr>
<td>MGA-504</td>
<td>Visual Effect</td>
<td>Skill</td>
<td>Practical</td>
<td>--</td>
<td>--</td>
<td>20</td>
<td>80</td>
<td>6</td>
</tr>
<tr>
<td>MGA-505</td>
<td>Pre-Production</td>
<td>Skill</td>
<td>Theory</td>
<td>20</td>
<td>80</td>
<td>--</td>
<td>--</td>
<td>6</td>
</tr>
</tbody>
</table>

**Note:** Winter Industrial/ In-house Training of 2-3 weeks in a relevant area after 5th Semester Examinations in winter break.
Training report by the student to be submitted within in one week of start of 6th Semester. Viva-Voce examination to be held within 3-weeks of the start of 6th semester.

**SEMESTER VI**

<table>
<thead>
<tr>
<th>Paper Code</th>
<th>Title</th>
<th>Generic/ Skill Component</th>
<th>Theory/ Practical</th>
<th>Internal (Theory)</th>
<th>External (Theory)</th>
<th>Internal (Practical)</th>
<th>External (Practical)</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>*GEN-601</td>
<td>Entrepreneurship Development Programme</td>
<td>Generic</td>
<td>Theory</td>
<td>20</td>
<td>80</td>
<td>--</td>
<td>--</td>
<td>6</td>
</tr>
<tr>
<td>*GEN-602</td>
<td>Design &amp; Communication Process</td>
<td>Generic</td>
<td>Theory</td>
<td>20</td>
<td>80</td>
<td>--</td>
<td>--</td>
<td>6</td>
</tr>
<tr>
<td>MGA-603</td>
<td>Final Project</td>
<td>Skill</td>
<td>Practical</td>
<td>--</td>
<td>--</td>
<td>60</td>
<td>240</td>
<td>18</td>
</tr>
<tr>
<td>**SIT-601</td>
<td>Summer Industrial/ In-house Training and Comprehensive Viva</td>
<td>Skill</td>
<td>Practical</td>
<td>--</td>
<td>--</td>
<td>20</td>
<td>80</td>
<td>6</td>
</tr>
</tbody>
</table>

**The Project will be 6 months duration.**

**Specialization (Choose any one Project)**

1. **Final Project:** Graphics Designing / Web Designing / 2D Animation / 3D Animation / Texturing & Shading, Lighting & Rendering / Visual Effects / Digital Compositing / Motion Graphics / Video Editing.

**Note:**

1. In the six semester students will choose any one project to make their own portfolio/Show reel for the specialization.

**Job Role:** Graphics Designer, Web Designer, Video / Audio Editing, VFX Compositor, 2D Animator, 3D Modular.
Paper Title: Communication Skills

Paper Code: GEN 101 Credits: 6

Job Role: Business Communication.

Objective: The objective of this paper is to develop communication skills, discover what business communication is all about and learn how to adapt the communication experiences in life and to the business world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I
Introduction to Communication: Need for Effective Communication, The Process of Communication, Levels of communication, Flow of communication, Use of language in communication, Communication networks, Significance of technical communication, Barriers to Communication, Types of barriers, Miscommunication, Noise, overcoming measures.

UNIT -II

UNIT –III
SWOT analysis: Self-management techniques, Self-image and Self-esteem, Building selfconfidence, Power of irresistible enthusiasm, Etiquettes, Etiquettes in Social as well as Office Atmosphere, Telephone Etiquettes, E-mail Etiquettes, etiquettes and manners. Importance of listening and responding.

UNIT -IV
Report Writing: Business reports: Types, Characteristics, Importance, Elements of structure, Process of writing, Order of writing, the final draft, check lists for reports. Business Correspondence: Inviting quotations, Sending quotations, placing orders, Inviting tenders, Sales letters, claim & adjustment letters and social correspondence.

Books Recommended:
1. ‘Management: A Global and Entrepreneurial Perspective’, by Heinz Weihrich,
3. ‘Developing Communication Skills’ by Krishmohan and Meera Banerjee, Macmillan India Ltd.
5. ‘Communication Skills’ by Sanjay Kumar & PushpLata, Oxford University Press
6. ‘An Approach to Communication Skills’ by Indrajit Bhattacharya, Delhi : Dhanpat Rai
7. ‘Introduction to Psychology’ by Atkinson and Hilgard’s, Edward E. Smith, Susan
8. Nolen-Hoeksema, Barbara Fredrickson, Geoffrey Loftus
Paper Title: FUNDAMENTALS OF INFORMATION TECHNOLOGY

Paper Code: GEN 102  
Credits: 6

Job Role: Computer Operator

Objective: The objective of the paper is to familiarize the students with developments in Information Technology, Internet and use of computer systems at operating system level and application level.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT - I
Computers: Introduction to computers, characteristics of computer, organization of computers, hardware, software, data, information. Types of computer: Classification on the basis of purpose: digital computers, analog computers, hybrid computers; Classification on the basis of size: microcomputers, mini computers, mainframe computers and supercomputers, desktop computers, laptops, workstations, PDA. Generations of computer, Uses and Application of computers.

UNIT- II

UNIT - III
Software: Introduction, Types of Software: Application software, System software. Operating system, functions of operating system, types of operating system. Data processing, Data processing systems: batch processing, online processing, time sharing, real-time applications, Single-user, multi-user, and client-server systems; distributed and parallel processing systems; Translators: compilers, interpreters and assemblers.

UNIT - IV
Computer Networks: Introduction, types of networks on the basis of area coverage: LAN, WAN, MAN. Internet and WWW: Evolution of Internet, Various Internet services (WWW, e-mail, telnet, ftp, IRC, news) and their uses, Access Methods, Browsers, Future of Internet, Applications of Internet, Evolution of www.

Books Recommended:
B.Voc. Multimedia (Graphics & Animation) Semester-1st

Paper Title: Understanding of Multimedia & Animation

Paper Code: MGA-103       Credits: 6

Job Role: Multimedia Editor

Objective: The objective of the paper is to familiarize the students with animation history and multimedia tools.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I


Graphics and Image Data Representations: Graphics/Image Data Types, File Formats-GIF, JPEG, PNG, TIFF, EXIF, PDF, WMF, BMP.


UNIT II


UNIT III


UNIT IV

History of Animation, Types of Animation, Skills for Animation Artist, Basic Principles of Animation, Animator’s Drawing Tools, Rapid Sketching & Drawing, Developing Animation Character, Essentials & Qualities of Good Animation Characters, Three Dimensional Drawings of Characters.

References:

B.Voc. Multimedia (Graphics & Animation) Semester-1

Paper Title: CorelDraw and Photoshop

Paper Code: MGA-104       Credits: 6

Job Role: Graphics Designer.

Objective: The objective of the paper is to familiarize the students with developments in graphics designing.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I


UNIT-II


UNIT-III

Adobe Photoshop Basics: Introducing Adobe Photoshop, Exploring the Photoshop Workspace, Touring the Workspace, Exploring the Photoshop Menu Bar.

UNIT-IV

Creating Selections: Using the Selection Tools, Working with Lasso Tools and Quick Selection Tools, Refining and Adjusting Selection.

Applying Sharpness and Blur Adjustment: Using Sharpening Filter, Using Blur Filter, Introducing the Blur Gallery, Using the Healing Brush Tools

References:

1. Dave Karlins, 1999: Sam’s Teach Yourself CorelDraw9 in 24 hours, Sams Publishing.
3. Altman, 1999: Mastering Corel-Draw, BPB.
Paper Title: Practical based on Paper MGA-103 & MGA-104

Paper Code: MGA-105       Credits: 6

Job Role: Multimedia Editor & Graphics Designer

There will be a practical examination in this paper along with semester examination. External examiner will evaluate the skills of the students in the field of CorelDraw and Photoshop. Examiner will give on-the-spot assignments to the students. Besides this a viva voce (oral examination) of each student one by one will also be taken by the examiner for testing the knowledge of the students.
B.Voc. Multimedia (Graphics & Animation) Semester- 2\textsuperscript{nd}

Paper Title: SOFT SKILLS AND PERSONALITY DEVELOPMENT

Paper Code: GEN-201 Credits: 6

Job Role: Creative Salesmanship

Objective: To expose the students to the concept of ‘Human Development’ (Personal and interpersonal) with emphasis on the latent resources that every human being possesses. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I
Attitude, Process of attitude formation, How to build a success attitude, Spot analysis, Self-management techniques, Self-image and self-esteem, Building self-confidence, Power of irresistible enthusiasm, etiquettes and manners in a group, public speaking, oral and written communication, Body language, Importance of listening and responding, tips for technical writing.

UNIT-II

UNIT-III
Introduction to Personality-Basic of Personality, Human growth and Behavior, Theories in Personality, Motivation; Techniques in Personality development – Self-confidence, Mnemonics, Goal setting, Time Management and effective planning, Techniques in Personality Development-Stress Management, Meditation and concentration techniques, Selfhypnotism, Self-acceptance and Self-growth.

UNIT -IV
Co-ordination while working in a team, Leadership styles, Leader & Team player. Management of conflict, Profiles of great and successful personalities, Role of career planning in personality development, How to face personal interviews and group discussions.

Books Recommended:
1. ‘Personality Development’ by Rajiv K. Mishra, Rupa & Co
2. ‘An Approach to Communication Skills’ by Indrajit Bhattacharya, Delhi : Dhanpat Rai
4. ‘Introduction to Psychology’ by Atkinson and Hilgard’s, Edward E. Smith, Susan Nolen-Hoeksema, Barbara Fredrickson, Geoffrey Loftus
5. ‘Communication Today & Tomorrow’ by Ravi Aggarwal, Sublime Publications, Jaipur
B.Voc. Multimedia (Graphics & Animation) Semester- 2nd

Paper Title: Programming in C

Paper Code: GEN-202       Credits: 6

Job Role: C Programmer.

Objective: To expose the students to the concept of C language programmer. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I

Fundamentals of ‘C’: I/O statements, assignment statements, Constants, variables and data types, Operators and Expressions, Standards and Formatted statements, Key word, Data Types and Identifiers.

UNIT II


UNIT III


UNIT IV

Structures and Unions: Declaration of structures, Accessing structure members, Structure Initialization, Arrays of structure, nested structures, structure with pointers, Unions.

Strings: Introduction, Declaring and Initializing string variables, Reading and writing strings, String handling functions.

References:
B.Voc. Multimedia (Graphics & Animation) Semester- 2nd

Paper Title: Cinematography

Paper Code: MGA-203 Credits: 6

Job Role: Cameraman, Film Maker.

Objective: To expose the students to the concept of camera angles. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I

Writing with Motion: Conceptual Tools of Cinematography, Frame, Lens, Light and Color, Texture, Movement, Establishment, Point-of-View.


Language of the Lens: Lens and the Frame, Image Control at the Lens.

UNIT II


Lighting Sources: Tools of Lighting, Daylight Source, Xenons, PARs, Soft Lights, Color Correction Fluorescents.
UNIT III
Camera Movement: Basic Techniques, Moves, Moving Shots, Camera Mounting, Crab Dolly, Cranes, Car Shots, Ariel Shots, Motion Control.

UNIT IV
Image Control: Color Printing, Controlling Color & Contrast, LookUp Tables, Camera Filter Types, Color Temperature & Filtration, Image Control with Camera.
Optics & Focus: Basic of Optics, Focus, Depth-of-Field, Macrophotography.
Set Operations: Director of Photography, Team, Time Code Slates.
Technical Issues: Flicker, Filming Practical Monitors, Shooting Process, Dimmers, High Speed Photography, Underwater Filming, Image Quality, Effects, Sun Location with Compass, Transferring Film to Video, Film Formats.

References:
B.Voc. Multimedia (Graphics & Animation) Semester- 2nd

Paper Title: Video and Audio Editing

Paper Code: MGA-204       Credits: 6

Job Role: Video & Audio Editor

Objective: To expose the students to the concept of video & audio editor. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I

Introduction to Video Editing, Non-Linear Editing: Meaning and Process, Hardware Requirements for NLE, Connecting Editing Equipment, Creating Time Line, Cut, Fade, Mix and Wipe, Introduction to Editing Aesthetics.

UNIT II


UNIT III


UNIT IV

Introduction to Audio Console, Audio Mixing, Deleting Unwanted Audio, Getting Output, Fades and Cross-Fades, Giving Audio Effects, Editing Sound Using Tape, Hard Disk, Introduction to Sound Aesthetics, Introduction to Sound Forge, Nuendo

References:

B.Voc. Multimedia (Graphics & Animation) Semester- 2\textsuperscript{nd}

Paper Title: Art Foundation: Drawing

Paper Code: MGA-205       Credits: 6

Job Role: Cartoonist, Caricature Artist, Drawing Artist.

Objective: To expose the students to the concept of cartoonist. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of \textbf{NINE} questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I

Free Hand Sketching From Real Objects: Building, Vehicles, Chair, Table, Trees etc. Preparing Colour Charts.
Kind of Design- 2 D & 3 D Design

UNIT II

Designing Letter Heads and Visting Cards, Designing Book Covers and Folders.

UNIT III

Landscape on the Spot & Landscape Form Memory (Hills, Trees, Hut, Rivers etc.), Layout Designing of Newspapers, Magazines, Print Advertisements.

UNIT IV

Poster Making on Various Themes and Designing of Hoarding Making.

Note: There will be a practical examination in this paper along with semester examination. External examiner will evaluate the skills of the students in the field of drawing. Examiner will give on-the-spot assignments/tasks to the students. Besides this a viva voce (oral examination) of each student one by one will also be taken by the examiner for testing the knowledge of the students.

Books Recommended:

- Drawing and sketching in pencil (Author : L.Guptill)
- Draw How to Master the Art (Jeffery Camp) Foreword by David Hockney.
- The Art of Drawing (Willy Pongany)
- Prachi- Visual Arts.
B.Voc. Multimedia (Graphics & Animation) Semester- 3rd

Paper Title: VALUE EDUCATION AND HUMAN RIGHTS

Paper Code: GEN 301 Credits: 6

Job Role: Holistic Marketing

Objective: The objective of this paper is to impart basic human values to students through formal education and contribute to making the student a true human being, who is able to face life and make it meaningful.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I
Value Education : Its purpose and significance in the present world ; Value system – The role of culture and civilization; Holistic living – Balancing the outer and inner –Body, Mind and Intellectual level- Duties and responsibilities.

UNIT II
Salient values for life- Truth, commitment, honesty and integrity, forgiveness and love, empathy and ability to sacrifice, care, unity, and inclusiveness, Self-esteem and selfconfidence, punctuality – Time, task and resource management – Problem solving and decision making skills- Interpersonal and Intra personal relationship – Team work – Positive and creative thinking.

UNIT III

UNIT IV

Books Recommended:
1. ‘Education and Human Values’ by M.G.Chitakra, A.P.H. Publishing Corporation, New Delhi, 2003
7. ‘Values and Education in Independent Indian’ by Kaul, G.N.,Associated Publishers, Mumbai, 1975
B.Voc. Multimedia (Graphics & Animation) Semester- 3rd

Paper Title: Internet Technology & Web Designing

Paper Code: GEN 302 Credits: 6

Job Role: Web designer.

Objective: To expose the students to the concept of web designer. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I
Introduction to Internet: Internet Overview, Evolution & History of Internet, Growth of Internet, Internet Services, Anatomy of Internet, Internet Applications, Impact of Internet.
Internet Connectivity: Different Types of Connections, Hardware and Software requirements of Internet, Levels of Internet Connectivity, Internet Service provider.

UNIT-II
Electronic Mail: Email Basics, Concepts of Email Server, Structure of Email Message, Working of Email System, Email Security.

UNIT-III
UNIT-IV

Internet Tools and Multimedia: Current Trends on Internet, Interactivity Tools, Multimedia and Animation.


References:

B.Voc. Multimedia (Graphics & Animation) Semester- 3rd

Paper Title: Flash

Paper Code: MGA-303       Credits: 6

Job Role: 2D Animator.

Objective: To expose the students to the concept of 2D Animation. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I
Understanding the Adobe Flash: The Topography of Flash CS5, Bitmap Handlers, Vector Based Drawing Programs, Flash in Internet Evolution, Exploring Companion Technologies, Planning Flash Projects.


UNIT –II

Integrating Media Files with Flash: Adding Sound, Importing Sound in Flash, Synchronizing Audio to Animation, Stopping Sounds, Editing Audio in Flash.

UNIT-III
Defining Vector, Bitmaps and Video: Importing and Copying Bitmaps, Setting Bitmap Properties, Bitmap Compression, Converting Raster to Vector.

Displaying Video: Integrating Video, Importing the Video, Compressing Video with Adobe Media Encoder CS5.

Adding Basic Interactivity to Flash Movie: Understanding Action and Event Handlers, First Five Actions, Building Timelines and Interactions.
UNIT-IV

Distributing Flash Movies: Testing Flash Movies, Publishing your Flash Movies, Selecting Formats, Integrating Flash Content with Web Pages, Writing Markup for Flash Movies, Detecting the Flash Player. Using The Flash Player: Using the Stand-Alone Flash Player, Using the Flash Player Plug In for Web Browsers, Using the Flash Player Setting.

References:

4. Alex Micheal, 2013: *Animating with Flash8:Creative Animation Techniques*, Focal Press.
B.Voc. Multimedia (Graphics & Animation) Semester- 3rd

Paper Title: Dreamweaver
Paper Code: MGA-304       Credits: 6
Job Role: Web Programmer.

Objective: To expose the students to the concept of HTML language editor. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I
Introduction: Explore the Dreamweaver Workspace, Features of Dreamweaver, Website Development Process, Adding a Folder to the Website, Creating the Homepage, Adding Pages to a Website, Developing a Webpage, Creating Head Content and Set Page Properties, Create, Import and Format Text, Adding Links to Webpages, Using the History Panel, Editing the Code. Adding Image, Enhancing the Image and Use Alternate Text, Creating a Website Color Palette.

UNIT-II
Links: External& Internal Links, Create, Modify and Copy Spry Menu Bar, Create an Image Map, Tables, Creating a Table, Properties, Merging Cells, Insert &Align Images in a Table, Insert Text & Format Cell Content.

UNIT-III
UNIT-IV

References:
B.Voc. Multimedia (Graphics & Animation) Semester- 3rd

Paper Title: Practical Based on MGA-303 & MGA-304
Paper Code: MGA-305       Credits: 6
Job Role: 2D Animator, Web designer / Programmer.

There will be a practical examination in this paper along with semester examination. External examiner will evaluate the skills of the students in the Subject of Adobe Flash and Dreamweaver. Examiner will give on-the-spot assignments to the students. Besides this a viva voce (oral examination) of each student one by one will also be taken by the examiner for testing the knowledge of the students.
B.Voc. Multimedia (Graphics & Animation) Semester- 4th

Paper Title: ENVIRONMENTAL STUDIES

Job Role: Environment Gaurd

Objective: The objective of the paper is to understand the basic concepts of the natural environment, to identify the different sources of pollution and their related effects, and to have awareness about the conservation strategies and laws followed in India.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I


UNIT II

Renewable and non-renewable resources. Concept of sustainable development. Biodiversity: definition, hotspots, national parks, biosphere reserves, wildlife sanctuaries.

UNIT III


UNIT IV

Global environment issues: Ozone depletion, global warming and climatic change. Environmental conservation strategies and projects in India, Ganga action plan, Yamuna action plan, Project tiger etc. Environmental laws in India.

Books Recommended:
B.Voc. Multimedia (Graphics & Animation) Semester- 4th

Paper Title: Animation Theory
Paper Code: GEN-402
Job Role: Scriptwriter.

Credits: 6

Objective: The objective of the paper is to understand the basic concepts of the story, Scriptwriter and cameraman.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I


UNIT-II


UNIT-III


UNIT-IV

References:


B.Voc. Multimedia (Graphics & Animation) Semester- 4th

Paper Title: 3ds Max: Modeling

Paper Code: MGA-403       Credits: 6

Job Role: 3D Modler.

Objective: To expose the students to the concept of 3D Modler. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I
Working with Files: 3ds Max Scene Files, Importing and Exporting, File Utilities, Accessing File Information.

UNIT II
Setting Preferences: General, File, Gamma & Look-Up Table, Rendering & Radiosity, Animation, Kinematic, Gizmo, Mental Ray, Global Container Preferences.
Primitive Objects: Selecting System Units, Creating Primitive Objects, Exploring the Primitive Object Types, Architecture Primitives, Modeling Helpers.

UNIT III
Transforming Objects: Translating, Rotating & Scaling Objects, Transformation Tools, Pivot Points, Align Commands, Grids, Snap Options.
Cloning & Creating Object Arrays: Cloning Objects, Cloning Options, Mirroring Objects, Cloning Over Time, Creating Object Arrays.
Organizing Scenes: Containers, Referencing External Objects, File Link Manager, Schematic View Window, Hierarchies.
UNIT IV

Subobjects & Modifiers: Model Types, Normals, Subobjects, Modifiers, Modifiers Stack.
2D Splines & Shapes: Drawing in 2D, Editing in Splines.
Modelling with Polygons: Poly Objects, Creating Editable Poly Objects.
Compound Objects: Types, Morphing Objects, Terrain Objects, Blob Mesh Objects, ProBoolean & Procutter Objects.

References:

5. Todd Daniele, 2009: Poly-modeling with 3ds Max: Thinking Outside of the Box, Focal Press.
B.Voc. Multimedia (Graphics & Animation) Semester- 4th

Paper Title: 3ds Max: Texturing, Lighting & Rendering

Paper Code: MGA-404       Credits: 6

Job Role: 3D Virtual Environmental Creator

Objective: To expose the students to the concept of 3D Virtual Environmental Creator. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-I


UNIT-II

Working with Backgrounds Cameras and Lightening: Configuring and Aiming Cameras, Setting Camera Parameters, Camera Connection Modifier, Loading a Background Image and Camera.

Using Lights and Basic Lighting Techniques: Understanding the Basic of Lights, Types of Lights, Creating and Positioning Light Objects, Viewing a Scene from Light.

UNIT-III


Rendering: Working with Render Parameters, Adding Pre-Render and Post-Render Scripts, Rendering Stylized Scenes, Managing Render States.

UNIT-IV

Batch and Network Rendering: Batch Rendering Scenes, Understanding Network Rendering, Setting up a Network Render System, Setting up 3ds Max.

Rendering with Mental Ray and Iray: Enabling Mental Ray and Iray, working with Mental Ray and Iray, using Render Elements.
References:

5. Todd Daniele, 2009: *Poly-modeling with 3ds Max: Thinking Outside of the Box*, Focal Press.
B.Voc. Multimedia (Graphics & Animation) Semester- 4th

Paper Title: Practical Based on Paper MGA-403 & MGA-404
Paper Code: MGA-405
Job Role: 3D Virtual Environmental Creator.

Credits: 6

There will be a practical examination in this paper along with semester examination. External examiner will evaluate the skills of the students in the field of animation using 3ds Max. Examiner will give on-the-spot assignments to the students. Besides this a viva voce (oral examination) of each student one by one will also be taken by the examiner for testing the knowledge of the students.
Paper Title: CRITICAL THINKING AND ELEMENTARY STATISTICS

Job Role: Statistical Analyst

Objective: The objective of the paper is to provide knowledge to students about the basics of statistics and to inculcate the habit of critical thinking.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. The examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

Unit I
Introduction: Statistics as a Subject; Statistical Data: Meaning and Types, Collection and Rounding of Data, Classification and Presentation of Data.

Unit II
Analysis of Univariate Data: Construction of a Frequency Distribution; Concept of Central Tendency, mean, median, and mode.

Unit III
Dispersion and Their Measures; Time Series: Meaning, Components, Models, Fitting Linear and Quadratic Trend

Unit IV
Index Number: Meaning, Types, and Uses: Methods of Constructing Price and Quantity Indices (Simple and Aggregate).

Books Recommended:
B.Voc. Multimedia (Graphics & Animation) Semester- 5th

Paper Title: Cyber Laws
Paper Code: MGA-502       Credits: 6

Job Role: Cyber Crime Controller.

Objective: The subject and the course content will help the student to understand, explore and acquire a critical understanding of Cyber Laws.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT I


UNIT II

Internet and the Protection of Software Copyright: - Open Source, Reverse Engineering Trademark Issues in Cyber Space: - Domain Name, the ICANN Uniform Domain, Name Dispute Resolution Policy

UNIT III

IPR in Cyber Space: - Patents in Digital Technology, Copy Rights in Digital Space, WIPO Internet Treaties, Trademark Online, IP Related Cyber Crimes: - Introduction, Essential Ingredients of Crime, Types of Internet Crimes, Cyber Crime and IPR

UNIT IV


References:
1  Chander, 2012: Cyber Laws and IT Protection, Harish Publisher: PHI, New Delhi.
B.Voc. Multimedia (Graphics & Animation) Semester- 5th

Paper Title: 3D Max Animation (Practical)

Paper Code: MGA-503       Credits: 6

Job Role: 3D Animator.

Objective: To expose the students to the concept of 3D Animation. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Unit-1

Forest Scene in 3DS Max:
- Preparing the Scene
- Camera Setup
- Creating Light Sources
- Texture the Scene
- Fine Tuning
- Final Render Settings

Unit-2

Environment Modeling:
- Preparing the Scene
- Camera Setup
- Lighting & Texturing
- Final Render Settings

Unit-3

Bedroom, Kitchen, Bathroom Interior Design:
- Preparing the Scene
- Camera Setup
- Create Light Sources
- Texture the Scene
- Fine-Tuning
- Final Render Settings

Unit-4

House Exterior:

- Preparing the Scene
- Create Additional Materials
- Light Inside
- HDRI Illumination
- Fine-Tuning Shadows on the facade
- Final Render Settings

Text Books
1. Name of Authors Title of the Book Publisher
2. 3dsmax7 Fundamentals New Riders
3. TedBoardman 3d’sMax5Fundamentals Tech media
4. Inside 3ds max7 NewRiders
5. Michelebousquet Modelrig.Animate with 3d’s max6 Many world production
Reference Books

1. Michael E. Mortenson 3D Modeling, Animation, and Rendering Create space
2. Boris Kulagin 3ds Max 8 from Modeling to Animation Bpb
3. Michael G. 3D Modeling and Animation Igi Publishing
B.Voc. Multimedia (Graphics & Animation) Semester- 5th

Paper Title: Visual Effects (Practical)
Paper Code: MGA-504       Credits: 6
Job Role: Visual Effect Artist

Objective: To expose the students to the concept of Visual Effect Artist. To fulfill the need and importance of creating an awareness of these resources and to maximize the same to enable the students meet the challenges of the modern world.

Note:-
- Composition, visual aesthetics, technical proficiency, and artistic merit 50%
- Completeness of project and clear communication of a unified concept 50%

Unit-I

Self Portrait (Chroma Key) - (Photoshop, after effects) Using media generated in class and images and video created and collected from the first homework assignment, compose a brief (30 seconds) self portrait video. Use any stills, moving images, titles, effects, music or sound that you wish. Final product must include: sound, animated stills, applied effects, chroma key video, transitions, and titles.

Unit-II

Title Sequence (as 3D motion graphic choreography) – (after effects, Photoshop, illustrator)
Create a title sequence for an invented television show or movie. Final version should be 30 seconds to 2 minutes long, utilize animated and/or processed text with layers of moving images. The final piece may be abstract or representational in its presentation. The project should emphasize 3D space, composition, design, and type in motion.

Unit-III

Film Festival Show Opener – (after effects, final cut, photoshop, etc…)
Create a concept for an opening sequence to a film festival (either the EMF Media Arts Festival or another festival of your choice). The opener should be 30 seconds-1 minute in length and is open ended in terms of content, but it must utilize digital tools and involve 3D compositing, lighting, and camera movement in After Effects.

Unit-IV

DVD and Demo Reel – (DVD studio Pro and any other software as needed) Compile all of your video work from the class onto DVD. The interface of the DVD must be original (NO templates), with menus, Transitions, and navigation all from scratch. Along with each project compiled on the DVD you must also edit together a short 30-second reel showcasing the highlights of your motion graphic work from the semester. The 30-second highlight reel should be included on the compilation DVD and also compressed and uploaded to either google video, youtube, vimeo, or another similar site.

Design a DVD cover and disc label. The graduate students are expected to also include work from outside of the class in the Demo Reel and must utilize animated transitions/effects for DVD menus and button transitions.

Books Recommend:

Job Role: Pre-production refers to the tasks that must be completed or executed before filming or shooting begins. This includes tasks such as hiring actors or models, building sets, budgeting, planning, scheduling, renting equipment and tests, to name a few of the many pre-production tasks.

Objective: The goal of pre-production is to develop an efficient structure for your project on which the final animation will be produced. In pre-production, we identify potential difficulties in production and work with you to minimize or eliminate them.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT: 1
Production Philosophy: The Production Process, Importance of Goals-Audience Analysis, Importance of Workflow, Difference between Studio and Field Production, Importance of Technology.

UNIT: 2
The Technology: Connecting the Real World to the Digital World, Audio Signals, Video Signals Synchronization, Audio and Video Compression
The Equipment: Camera, Viewfinder and Camera Controls, Camera Supports, Lighting.

UNIT: 3
Preproduction: Introduction, Script Formats Organizing Forms.
Production: Production Stages and Setup, Setting Up Lighting Preparation Shooting, Framing Principles, Creating Movement and Editing.

UNIT: 4

Suggested books for Reading:
• The Five C's of Cinematography: Motion Picture Filming Techniques, by Joseph V. Mascelli
• Single Camera Video Production, by Robert B Musburger.
Objective: EDPs aim at training various target groups in entrepreneurial traits so that they obtain adequate information, motivation and guidance in setting up their own enterprises.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

UNIT-1

UNIT-II

UNIT-III

UNIT-IV

References
B.Voc. Multimedia (Graphics & Animation) Semester- 6th

Paper Title: Design & Communication Process

Paper Code: GEN-602       Credits: 6

Job Role: Graphics Designing.

Objective: To develop intellectual awareness and curiosity to acquire the knowledge necessary to sustain effective work in visual communication design.

Instructions:
1. The syllabus of this paper has been divided into FOUR units.
2. Examiner will set a total of NINE questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
3. The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
4. All questions carry equal marks.

Unit-I
Basic Principles of composition: What is composition, why learn these principles, fulfilling the purpose.
The Subject: Selection and study, drawing steps.

Unit- II

Three Principles: Unity, Balance, Center of interest.
Achieving Emphasis: Light and shad, Details, contrasts.

Unit-III
Six Visual elements: - Color, Line, Shape, Value & Tone, Texture, Volume.
Pictorial principles:- Contrast, Harmony, Emphasis, Movement, Proportion, Pattern, Variety, Rhythm, Repetition.

Unit-IV

Text books: -

• Design and Communication: A Foundation Course By Peter Gowers ,Blackie, 1988 pub.(UK)

Reference book: -

• Design for communication: conceptual graphic design basics By Elizabeth Resnick ,John Wiley & Sons pub.(India)
B.Voc. Multimedia (Graphics & Animation) Semester- 6th

Paper Title: FINAL PROJECT

Paper Code: MGA-603  Credit: 6

Job Role: Graphics Designer, Web Designer, Video / Audio Editing, VFX Compositor, 2D Animator, 3D Modular.

Specialization (Choose any one Project)