

# LOCF/CBCS/ B.Sc. (Multimedia)/KUK

Scheme of Examination of B.Sc. (Multimedia) for 5<sup>th</sup> & 6<sup>th</sup> Semester under CBCS/LOCF for Institute of Mass Communication & Media Technology (IMC&MT, KUK) in phased manner w.e.f. Academic Session 2020-21.

## Semester-V

Course Code	Course Title	Course Type	Contact Hours per Week				Credits	Total Credits	Marks				Duration of Exam	
			L	T	P	Total			T	P	IA	Total		
B-MMT-501 (a)	Interactive Courseware Designing OR Information Security	DSE-1	5	1	-	6	6	6	120	-	30	150	3 Hours	
B-MMT-501(b)			5	1	-	6	6		120	-	30	150	3 Hours	
B-MMT-502(a)	Communication Technologies OR Lighting Techniques	DSE-2	5	1	-	6	6	6	120	-	30	150	3 Hours	
B-MMT-502 (b)			5	1	-	6	6		120	-	30	150	3 Hours	
B-MMT-503 (a)	Mobile Computing OR Social Media Marketing	DSE-3	5	1	-	6	6	6	120	-	30	150	3 Hours	
B-MMT-503 (b)			5	1	-	6	6		120	-	30	150	3 Hours	
B-MMT-504	SFX and VFX (Theory)	SEC-3	1	-	-	1	1	2	20	-	5	25	2 Hours	
B-MMT-505	SFX and VFX (Practical)		-	-	1	2	1		-	20	5	25	2 Hours	
B-MMT-506	*Internship Report							2			50			
<b>Total Credits</b>								<b>22</b>	<b>Total Marks</b>				<b>550</b>	

### Semester-VI

Course Code	Course Title	Course Type	Contact Hours per Week				Credits	Total Credits	Marks				Duration of Exam
			L	T	P	Total			T	P	IA	Total	
B-MMT-601 (a)	Multimedia Management and Research OR	DSE-4	5	1	-	6	6	6	120	-	30	150	3 Hours
B-MMT-601 (b)	Organization Portfolio		5	1	-	6	6		120	-	30	150	3 Hours
B-MMT-602 (a)	3D Animation (Theory)	DSE-5	4	-	-	4	4	6	80	-	20	100	3 Hours
B-MMT-603	3D Animation (Practical) OR		-	-	2	4	2		-	40	10	50	3 Hours
B-MMT-602 (b)	Web Technologies		5	1	-	6	6		120	-	30	150	3 Hours
B-MMT-604 (Optional)	<b>Project</b>	DSE-6**	-	-	-	6	6	6	-	120	30	150	3 Hours
B-MMT-604 (i)	Web Production(Multi media Website)												
B-MMT-604 (ii)	Advertisement Production(ad campaign)												
B-MMT-604 (iii)	Animation production(Animation Film)												
B-MMT-604(iv)	Video production (Short Film)												
B-MMT-605	Entrepreneurship (Theory)	SEC-4	1	-	-	1	1	2	-	20	5	25	2 Hours
B-MM9T-606	Entrepreneurship (Practical)		-	-	1	2	1		20	-	5	25	2hours
<b>Total Credits</b>							<b>20</b>	<b>Total Marks</b>				<b>500</b>	

\* Students have to complete the internship of four to six weeks after the examination of 4<sup>th</sup> semester and submit the report of internship in the commencement of 5<sup>th</sup> semester. The report submitted by the students will be evaluated by the teacher appointed by the Director and a viva-voce will be conducted during practical examination.

\*\*Viva -Voce of DSE-6 (Project) is to be evaluated by a panel of three examiners to be appointed by the Director of the institute and it is to be submitted to the institute by the student 20 days prior to the theory examination of the semester in which the Report is supposed to be submitted.

## B-MMT- 501 (a) : Interactive Courseware Designing

Time:3 Hrs.

Credits: 6

Total Marks: 150

Theory: 120

Internal Assessment: 30

**Course Objectives:** This course is design to make students capable to create educational communication software tools for the future e-learning days using learning models and multimedia tools.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT 501 (a).1:</b> Understand the learning principles.
<b>B-MMT 501 (a).2:</b> Study the learning models for courseware designing.
<b>B-MMT 501 (a).3:</b> Learn the design process of courseware content for e-learning.
<b>B-MMT 501 (a).4:</b> Evaluate the courseware content and learning system.

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

### Unit-I

Coursework – introduction need and Structure

Components of multimedia Instructional material Dale’s Cone of Learning

Principles, methods and types of learning

ADDIE Model & Process

### Unit II

Courseware design knowledge and skills

Selecting subjects for the interactive courseware

Preparing synopsis for a courseware Sequencing of learning points

Role and responsibilities of team members

### Unit III

Courseware development life cycle

Hypermedia authoring and publishing

Adding audio-visual contents

Creating self check exercises

Evaluating the quality of Courseware

### Unit IV

Features of Smart Classroom

Computer aided learning-process, types, pros and cons

Future of computer aided learning :ICT, m-learning, flipped learning, virtual university

Learning Management System(LMS): Moodles, clickers, Massive Open online Course(MOOCs)

## References:

- Interactive Multimedia in Education and Training edited by Sanjaya Mishra, Ramesh C. Sharma; Idea Group Inc (IGI). Copyright.
- e-Learning by Design by William Horton; John Wiley & Sons. Copyright.
- How to Plan and Manage an E-learning Programme by Roger Lewis, Quentin A. Whitlock; Gower Publishing, Ltd.. Copyright.
- Integrated E-Learning: Implications for Pedagogy, Technology and Organization edited by Wim Jochems, Rob Koper, Jeroen Van Merriënboer; Routledge. Copyright.
- The Design and Production of Self-instructional Materials by Fred Lockwood; Psychology Press. Copyright.



## B-MMT-501 (b) : Information Security

Time: 3 Hrs.

Credits: 6

Total Marks: 150

Theory: 120

Internal Assessment: 30

**Course Objectives:** The objective of this course is to secure the privacy, authentication integration, validation and rights of the information that will be used for major multimedia application areas.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-501 (b).1:</b> Define what information is and appreciate the value of information .
<b>B-MMT-501 (b).2:</b> Understand the CIA triad of Confidentiality, Integrity and Availability
<b>B-MMT-501 (b).3:</b> Analyze and resolve security issues in networks and computer systems
<b>B-MMT-501 (b).4</b> Understanding of security, cryptography, system attacks and defences against them.

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

### Unit-I

**Introduction:** Basic concepts: threats, vulnerabilities, controls; risk; confidentiality, integrity, availability; security policies, security mechanisms; assurance; prevention, detection, deterrence

**Basic cryptography:** Basic cryptographic terms, Historical background, Symmetric crypto primitives, Modes of operation, Cryptographic hash functions, Asymmetric crypto primitives

### Unit-II

**Program security:** Flaws: Malicious code: viruses, Trojan horses, worms; Program flaws: buffer overflows, time-of-check to time-of-use flaws, incomplete mediation; Defenses: Software development controls, testing techniques

**Security in conventional operating systems:** Memory, time, file, object protection requirements and techniques, Protection in contemporary operating systems

### Unit-III

**Identification and authentication:** Identification goals, Authentication requirements, Human authentication, Machine authentication

**Trusted operating systems:** Assurance, trust, design principles, evaluation, criteria, Evaluation process

**Database management systems security:** Database integrity, Database secrecy, Inference control, multilevel databases

### Unit-IV

**Network security:** Network threats: eavesdropping, spoofing, modification, denial of service attacks; Introduction to network security techniques: firewalls, virtual private networks, intrusion detection,

**Management of security:** Security policies, Risk analysis, Physical threats and controls

Legal aspects of security, Privacy and ethics

## **References:**

- Information Security: The Complete Reference, Second Edition; Mark Rhodes-Ousley McGraw Hill Professional, 03-Apr-2013
- Fundamentals of Information Security: A Complete Go-to Guide for Beginners to Understand All the Aspects of Information Security by Sanil Nadkarni
- INFORMATION SECURITY (English, Paperback, Dr. Bhavana S. Karmore)
- Information Security by Pankaj Sharma, S.K. Kataria & Sons





# B-MMT-502 (a): Communication Technologies

Time: 3 Hrs.

Credits: 6

Total Marks: 150

Theory: 120

Internal Assessment: 30

**Course Objectives:** This course will enable the knowledge of orthodox communicational technologies as well as current trending communication devices and techniques which will be responsible for multimedia communication.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-502 (a).1:</b> Compare the emergence, diffusion, and evolution of communication technologies.
<b>B-MMT-502 (a).2:</b> Learn various TV standards and Radio frequency.
<b>B-MMT-502 (a).3:</b> Evaluate the characteristics of current communication technologies.
<b>B-MMT-502 (a).4</b> Learn about the satellite broadcasting.

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

## Unit-I

Brief introduction to mass communication technologies:

Printing, Photography, Audiography, Videography, Cinematography

Communication satellites: types, structure and functioning

The process of radio, television and web broadcasting

## Unit-II

Wireless Networks: Wireless Network Architecture, wireless switching techniques,

Wireless Communication problem, wireless network reference model

Wireless networking issues & standards

Bluetooth: User Scenarios, Architecture

## Unit III

Radio bands and frequencies

Satellite radio and web radio

Infra red Vs radio transmission

Infrastructure and Ad-hoc Network

## Unit IV

Television standards: NTSC, PAL and SECAM

Interactive television, HDTV, IPTV,

Display technology: CRT, plasma, LCD & LED,

Direct to Home (DTH), Fiber optics

## **References:**

- Communication Technology **By Everett M. Rogers**
- **Communication and Educational Technology, by Sharma Suresh**
- Information and Communication Technologies and Real-Life Learning: **by Arthur Tatnall**
- Communication systems by Sanjay Sharma



## B-MMT-502 (b): Lighting Techniques

Time:3 Hrs.

Credits: 6

Total Marks: 150

Theory: 120

Internal Assessment: 30

**Course Objectives:** This course is design to deliver knowledge of a very important aspect of video production and animation i.e lighting, through the demonstration and working of various lighting equipments.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-502(b).1:</b> Learn the importance of light and different types of light.
<b>B-MMT-502(b).2:</b> Describe the various lighting techniques.
<b>B-MMT-502(b).3:</b> Explain the lighting equipments.
<b>B-MMT-502(b).4</b> Learn about different lighting techniques used in film and TV industry.

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

### Unit-I

Introduction to lights and define different types of light

Introduction to Lighting Techniques

Lighting controls and functions, Principles of three-point lighting

### Unit-II

Lighting Theories and Techniques, Discuss about Light Source, Light Source Intensity, Light Quality, Hard Light and Soft Light, Key Light, Color Effects, Fill Lights, Background Light, Separation Lights.

### Unit- III

Introduction to lighting equipment, handling and safety, Redheads, Dedo, Fluoro bank.

Low-Intensity Reflections, the Gradational Reflection, Skimmed Reflections, the Apex Reflection, Foreground

Reflections, Colored Reflectors, Shadows, Theory of 3-dimensional contrast,

Elements of 3-dimensional contrast

### Unit –IV

Specialized lighting in Fashion Photography, Studio Portrait Photography, Film and TV

Use of diffusers and filters, camera control and Lighting

Creating perspective and depth through lighting, Continuity of lighting

Hands on lighting exercises and Creating Lighting effects

## **References:**

- The architecture of light: architectural lighting design concepts and techniques. A textbook of procedures and practices for the architect, interior designer and lighting designer; Sage Russell, 337 Pages · 2012
- Set Lighting Technician's Handbook: Film Lighting Equipment, Practice, and Electrical Distribution; by Harry Box; Focal Press; 585 Pages; 2003
- Stage Lighting Technician Handbook; 207 Pages · 2005
- Lights, Camera, Capture: Creative Lighting Techniques for Digital Photographers; by Bob Davis; 243 Pages · 2010
- Lighting for Animation: The Art of Visual Storytelling; by Jasmine Katatikarn & Michael Tanzillo; 273 Pages · 2016



## B-MMT-503 (a): Mobile Computing

Time:3 Hrs.

Credits: 6

Total Marks: 150

Theory: 120

Internal Assessment: 30

**Course Objectives:** This course is designed to develop the understanding of the ways that mobile technologies can be used for teaching and learning. They will also consider the impact of mobile computing on the field of education.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-503 (a).1:</b> Explain the basics of mobile Computing.
<b>B-MMT-503 (a).2:</b> Describe the functionality of Mobile IP and Transport Layer
<b>B-MMT-503 (a).3:</b> Classify different types of mobile telecommunication systems
<b>B-MMT-503 (a).4</b> Understand IP and TCP layers of Mobile Communication.

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

### Unit-I

Mobile Computing: Mobile communication, Mobile computing, Mobile computing architecture, Mobile Devices, Mobile System Networks, Mobility Management

### Unit-II

Global Systems for Mobile Communications (GSM): Mobile Services, System architecture, Protocols, Localization & Calling, Handover, Security. GPRS: GPRS System Architecture, UMTS: UMTS System Architecture. LTE: Long Term Evolution

### Unit-III

Mobile IP: Goals, Assumptions, Entities and Terminology, IP Packet Delivery, Agent Discovery, Registration, Tunneling and Encapsulation, Optimizations, Dynamic Host Configuration Protocol (DHCP)

### Unit-IV

Mobile Transport Layer: Traditional TCP, Indirect TCP, Snooping TCP, Mobile TCP, Fast retransmit/fast recovery, Transmission /time-out freezing, Selective retransmission, Transaction oriented TCP, TCP over 2.5G/3G Wireless Networks.

## **References:**

- Asoke K Talukder, et al, "Mobile Computing", Tata McGraw Hill, 2008.
- Matthew S.Gast, "802.11 Wireless Networks", SPD O'Reilly.
- Ivan Stojmenovic, "Handbook of Wireless Networks and Mobile Computing", Wiley, 2007.
- Kumkum Garg, "Mobile Computing", Pearson.
- Handbook of Security of Networks, Yang Xiao, Frank H Li, Hui Chen, World Scientific, 2011.





## B-MMT-503 (b): Social Media Marketing

Time:3 Hrs.  
Credit:6

Total Marks: 150  
Theory: 120  
Internal Assessment: 30

**Course Objectives:** This course is designed to develop an overall understanding of digital marketing / online marketing platforms, mainly web analytics, social media tools, marketing through search engines, search engine optimization, email marketing.

### Course Learning Outcomes:

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

**B-MMT-503 (b).1:** Understand the basic fundamentals of digital marketing

**B-MMT-503 (b).2:** Understand the role of web media and search engines in marketing.

**B-MMT-503 (b).3:** Implement the SEO and social media marketing.

**B-MMT-503 (b).4** Develop and execute a marketing plan, incorporating all elements of the marketing mix.

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

### Unit-I

Introduction to digital marketing  
Planning and creating a website  
Domain registration and hosting  
Creation of pages and menu  
Blog page design  
Difference between post and pages

### Unit-II

Introduction to SEO  
On-page SEO Vs Off-page SEO  
Use of keywords  
Keywords research and planning  
Site map, Social bookmarking

### Unit-III

Social Media Optimization  
Social media marketing and tools  
Use of different social media platforms  
Blogging  
Video creation and sharing  
Content creation

### Unit-IV

Web Analytics  
Google AdSense  
Google Adwords  
E-mail marketing  
Facebook marketing  
Twitter marketing  
Youtube marketing

## **References:**

- Social Media Marketing (English, Paperback, Williams Richard)
- Social Media Marketing Step By Step Instructions For Advertising Your Business On Facebook by Noah Gray , Pluto King Publishing
- Digital Marketing Essentials You Always Wanted to Know Paperback by Vibrant Publishers
- Social Media Marketing (Paperback) By: Liana Li Evans Publisher: Pearson Education



## B-MMT-504: SFX and VFX (Theory)

Time: 2 Hrs.

Credits: 1

Total Marks: 25

Theory: 20

Internal assessment: 5

**Course Objectives:** This course will develop the creativity level to design and furnish the post-production stage of audio-video production with the addition of several special effects using audio and video effects software.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-504.1:</b> Understand the sound fundamentals and visual tools.
<b>B-MMT-504.2:</b> Learn how to plan and visualize a special effect in sound and video.
<b>B-MMT-504.3:</b> Develop basic skills in the creation of special effects make-up.
<b>B-MMT-504.4:</b> Produce creative and technical skills in various domains of cinema, gaming, vfx and multimedia.

**Note:- The question paper will be divided into three Units containing five questions. Students are required to attempt three questions in all. There will be two questions in Unit I & II. The students are required to attempt one question each from Unit I & II. Each question will carry 5 marks. Unit-III will have only one Compulsory question of 10 marks containing six short notes covering the entire syllabus and students are required to attempt any five.**

### Unit I

Audio and Acoustics Fundamentals, Digital Recording and Editing Systems; Mixing, metering and signal levels, Signal Processing and Effects, Digital Audio Interfaces and Networking; MIDI and Musical Instrument Control; Synchronization  
Creating seamless audio loops; Equalization: Meaning, Types & Process; Filters: Meaning & Types; Process of Voice Over, Dubbing

### Unit II

Introduction to VFX, Use of VFX, Importance of VFX, Feature of VFX  
After effects : Workspace of After Effect, Tools and Menu, Tracking (Motion tracking with one point and multiple point tracking of a live footage), Over view to user interface of after effects, Lighting in after effects; Keying, keying with the use of plugging, Chroma Keying, Stabilize, Particle, Colour Correction, Morphing, Wire Removing, Rotoscoping, Motion graphics, Texturing and rendering

## **Reference:**

1. Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema, by David Sonnenschein; Wiese, Michael Productions; ISBN-10: 0941188264, ISBN-13: 9780941188265;10/25/2001
2. Sound and Recording- Applications and Theory, *By Francis Rumsey*, Copyright Year 2021; ISBN 9780367553029, Published July 30, 2021 by Routledge, 618 Pages 423 B/W Illustrations
3. VFX Fundamentals (English, Paperback, Jackson Wallace)
4. Why I Do VFX: The Untold Truths About Working in Visual Effects :by Vicki Lau
5. VFX Fundamentals Visual Special Effects Using Fusion 8.0 2016 Edition by Wallace Jackson , Apress
6. VFX: How They Do It: by Abhishek Kange
7. The Visual Effects Producer (English, Paperback, Finance Charles)



## B-MMT-505: SFX and VFX (Practical)

Time: 2 Hrs.

Credits: 1

Total Marks: 25

Practical: 20

Internal assessment: 5

**Course Objectives:** This course will develop the practical skills to apply the sound effects as well as video effects during the post production stage of films and animation movie.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-505.1:</b> Perform the process of sound creation, mixing, synchronization.
<b>B-MMT-505.2:</b> Applying filters and effects using appropriate audio software
<b>B-MMT-505.3:</b> Carry out industry oriented new technologies and new trends in animation and graphics.
<b>B-MMT-505.4:</b> Apply technical knowledge and methodologies from animation software in order to conduct research in various fields of 3d animation and vfx simulations.

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

<b>List of Practical Exercises:</b>
1. Video shooting, practicing the craft of film making
2. Editing of video clippings and footage by using Adobe Premiere and Adobe After Effects
3. Addition of captions, sequence, titles, audio timeline
4. Refining sequence, practice with transition
5. Saving in different video formats
6. Creating and using compositions, applying special effect.
7. Practice on Animate transformations, rotoscoping
8. Recording voice-overs, editing and mixing sound
9. Creating audio loops
10. Applying audio filters and sound effects





## **B-MMT-506: Internship Report**

Credits: 2

Total Marks: 50

\* Students have to complete the internship of four to six weeks after the examination of 4<sup>th</sup> semester and submit the report of internship in the commencement of 5<sup>th</sup> semester. The report submitted by the students will be evaluated by the teacher appointed by the Director and a viva-voce will be conducted during practical examination.

## **B-MMT-601 (a): Multimedia Management and Research**

Time:3 Hrs.  
Credit:6

Total Marks: 150  
Theory: 120  
Internal Assessment: 30

### **Course Objectives:**

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-601 (a).1:</b> Understand the basic fundamentals of marketing
<b>B-MMT-601 (a).2:</b> learn the new trends of multimedia marketing
<b>B-MMT-601 (a).3:</b> understand the product life cycle and branding methods
<b>B-MMT-601 (a).4:</b> learn about the multimedia research process, methods and strategies.

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

### **Unit I**

Marketing: meaning and scope, concept of multimedia marketing, tools and elements of multimedia marketing, benefits of multimedia marketing, multimedia marketing environment, marketing ethics

### **Unit II**

New trends in marketing: globalization and consumerism, green marketing, direct marketing, network marketing, event marketing.

Product decisions: new product development, product mix, product life cycle, branding and packaging; pricing methods and strategies

Promotion decisions: promotion mix, advertising, sales promotion, publicity and personal selling

### **Unit III**

Research: meaning, objective and types

Introduction to various research approaches

Significance of research, elements of good research

### **Unit IV**

Research process: define research problem, research design,

Research methodologies: survey method, content analysis, case studies

Methods of data collection, processing and analyzing the data

Uses of research in multimedia production

## **Reference:**

- Multimedia Marketing for Design Firms, Curtis B. Charles, Karen M. Brown, Good B; Publisher : New York: John Wiley and Sons, 1996; ISBN: 094711460999
- Online Multimedia Advertising: Techniques and Technologies; Xian-Sheng Hua, A. Hanjalic, Tao Mei; IGI Global, 31-Dec-2010 - Computers - 352 pages
- Making Money With Multimedia, by Rosen; Addison Wesley; 8 March 1995; ISBN-10: 0201822830, ISBN-13: 978-0201822830; 216 pages
- The multimedia marketing experience; by Gillian Roberts; Glasgow Caledonian University, Dept. of Learning & Educational Development (January 1, 2001); ISBN-10 : : 13-ISBN ,1903661153 -978 1903661154; 20 pages
- Research Methodology : Methods And Techniques; C.R. Kothari and Gaurav Garg; ISBN-10: 9386649225, ISBN-13: 978-9386649225; Fourth Edition; New Age International Publishers
- Media Research Methods - Understanding Metric and Interpretive Approaches; James A. Anderson - University of Utah, USA; June 2013; 464 pages; SAGE Publications, Inc.
- Frontiers of Multimedia Research; Shih-Fu Chang ; Morgan & Claypool Publishers; □ ISBN-10 : 1970001046,ISBN-13 : 978-1970001044; Paperback – Import, 3 January 2018



## B-MMT-601 (b): Organization Portfolio

Time: 3 Hrs.  
Credit: 6

Total Marks: 150  
Theory: 120  
Internal Assessment: 30

**Course Objectives:** This course is designed for students to showcase their artifacts so that they can present themselves in front of the employer.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-601 (b).1:</b> Define use of portfolio in marketing.
<b>B-MMT-601 (b).2:</b> Understand the use of multimedia in portfolio development
<b>B-MMT-601 (b).3:</b> create learning points for the portfolio designing
<b>B-MMT-601 (b).4:</b> Learn industry based standards and skills

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

### Unit-I

Introduction to Portfolio: Identification of definition and purposes

Making a conceptual framework Portfolio process and

Utilization Portfolio assessment process

Steps of development: plan, gather artifacts, update references, creating support material, assembling portfolio, and use in interviews

### Unit-II

Electronic portfolio development

Benefits of an electronic portfolio

Designing an electronic portfolio

Portfolio designing software

Portfolio websites

### Unit-III

Identifying types of learning

Gathering of supporting documentation

Portfolio building and submission

Portfolio evaluation

### Unit-IV

Use of a portfolio in the graphic arts

Industry Preparation and presentation techniques

Industry standards for portfolios Time management and multitasking

Diversity of media

## **References**

- Herbert, E. (2001). *The power of portfolios: what children have taught us about learning and assessment*. San Francisco: Jossey-Bass.
- Williams, A. G. & Hall, K. J. (2001). *Creating your career portfolio: at a glance guide for students*. New Jersey: Prentice-Hall, Inc.
- Williams, A. G., Hall, K. J., Shadix, K., & Stokes, D.M. (2005). *Creating your career portfolio: at a glance guide for dietitians*. New Jersey: Pearson Education, Inc.





## B-MMT-602 (a): 3D Animation (Theory)

Time:3 Hrs.  
Credit:4

Total Marks: 100  
Theory: 80  
Internal Assessment: 20

**Course Objectives:** The course provides students the fundamental skills to animate effectively with simple objects and characters necessary for work in 3D Animation

### Course Learning Outcomes:

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

**B-MMT-602 (a).1:** Develop their skills using key-frame animation and the graph editor.

**B-MMT-602 (a).2:** Learn tools and techniques of character and hard body modelling with Maya.

**B-MMT-602 (a).3:** Execute creative concepts and ideas through a variety and combination of techniques including hand drawn, computer generated, 2D and 3D storyboards and animatics.

**B-MMT-602 (a).4:** Apply 3D techniques that demonstrate characters with realistic motion and a full range of emotion in animated characters.

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

#### Unit I

- Introduction to Maya
- Maya user interface
- Difference between EP and CV curve tool
- Curve editing tools
- Types of surface(loft , revolve)

#### UNIT-II

- Basics of Modeling Nurbs modelling (chess board)
- Introduction to polygon modeling
- Simple objects(Props) modeling using polygons
- Sub div modeling

#### UNIT-III

- Polygon Modeling Architectural modeling
- Car modeling
- Face modeling
- Character modeling

#### UNIT-IV

- Texturing Introduction to hypershade
- Texturing and mapping
- UV mapping
- Lighting

## **References**

- Understanding 3D Animation Using Maya; ISBN: 9780387269047, 0387269045; Publisher: Springer New York; Author: John Edgar Park
- 3D Animation for the Raw Beginner Using Maya; ISBN: 9781482249248, 1482249243; Publisher: CRC Press; Author: Roger King
- Getting Started in 3D with Maya Create a Project from Start to Finish—Model, Texture, Rig, Animate, and Render in Maya; ISBN: 9781136147098, 1136147098; Publisher: CRC Press; Author: Adam Watkins
- Exploring 3D Modeling With Maya 7 2006 Edition by Patricia Beckmann, Scott Wells , Cengage



## B-MMT-603: 3D Animation (Practical)

Time:3 Hrs.  
Credit:2

Total Marks: 50  
Practical: 40

Internal Assessment: 10

**Course Objectives:** The course provides students the fundamental skills to animate effectively with simple objects and characters necessary for work in 3D Animation

<b>Course Learning Outcomes:</b>
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After completing the Course, the student will be able to:
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<b>B-MMT- 603.1:</b> Develop their skills using key-frame animation and the graph editor.
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<b>B-MMT-603.2:</b> Learn tools and techniques of character and hard body modelling with Maya.
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<b>B-MMT-603.3:</b> Execute creative concepts and ideas through a variety and combination of techniques including hand drawn, computer generated, 2D and 3D storyboards and animatics.
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<b>B-MMT-603.4:</b> Apply 3D techniques that demonstrate characters with realistic motion and a full range of emotion in animated characters.
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**Note:- The students will do practical assignments assigned by the concerned teacher throughout the whole semester and will submit them in the form of hardcopy/softcopy to the teacher. External Examiner will evaluate the work done by the student, will conduct the practical and viva-voce.**

<b>List of Practical Exercises:</b>
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Object Modeling and Texturing
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Environment and Scenes Modeling
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Environment and Scenes Texturing
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Human Body Parts Modeling and Texturing
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Lower Body Modeling of Character
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Upper Body Modeling of Character
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Face and Head Modeling
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Cloth and Hair Modeling
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Skin Texturing
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Concept Character Modeling
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## B-MMT-602 (b): Web Technologies

Time:3 Hrs.  
Credit:6

Total Marks: 150  
Theory: 120  
Internal Assessment: 30

**Course Objectives:** This course is based on the World Wide Web as a platform for interactive applications, content publishing and social services.

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-602 (b).1:</b> learn the website designing and development
<b>B-MMT-602 (b).2:</b> understand the semantic web concepts and techniques
<b>B-MMT-602 (b).3:</b> to learn the interactive online web content and applications
<b>B-MMT-602 (b).4:</b> understand the social media network concepts

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

### Unit I

Planning and designing a website, maintaining view state, connecting and hosting database, choosing a web server for hosting, domain name registration, configuration and optimization settings, promotion and maintenance of website

Uniform Resource Locators (URLs) & Web Browsers

### Unit II

Semantic Web applications and services, Semantic Search, e-learning, Semantic Bioinformatics, Knowledge Base, XML Based Web Services, Creating an OWL-S Ontology for Web Services, Semantic Search Technology, Web Search Agents and Semantic Methods

### Unit III

Web technologies: Terminology & Applications; Active X Components, XML, Chat applets, Ajax, Servlet, Java Beans, J2ME, SQL, Ftp

Android: Ice cream Sandwich, Jellybean Peer to Peer and Cloud Network

### Unit IV

Social Network Analysis, development of the social networks analysis,

Electronic Sources for Network Analysis – Electronic Discussion networks, Blogs and Online Communities, Web Based Networks. Building Semantic Web Applications with social network features.

**References:**

1. Semantic Web Technologies, Trends and Research in Ontology Based Systems, J.Davies, R.Studer, P.Warren, John Wiley & Sons.
2. Semantic Web and Semantic Web Services -Liyang Lu, Chapman and Hall/CRC Publishers,(Taylor & Francis Group)
3. Information Sharing on the semantic Web - Heiner Stuckenschmidt; Frank Van Harmelen, Springer Publications.
4. Programming the Semantic Web, T.Segaran, C.Evans, J.Taylor, O'Reilly, SPD





## **B-MMT-604: Major Project**

Credit:6

Total Marks: 150  
Practical: 120  
Internal Assessment: 30

### **Rationale**

The main idea behind Major Project is to document the experiences of students being a team member of a desktop publishing/graphic designing

/animation/audio-video production/web designing projects in a real life environment so that s/he could learn to recognize all minor intricacies of production work. Moreover she/he can produce and refer back to the report as and when it is needed. Nonetheless it would be helpful to authenticate the projects, he has completed.

### **Introduction**

Each student shall be supposed to prepare a project report with CD/DVD (soft copy) content during the last semester of the course. The project work will be purely practical work. This report will be prepared in accordance with the format provided by the institute. Report should be printed both side with hard bound. Report should contain minimum 40-50 pages of text, graphics, visuals etc. One of the following topics will be selected for the project work:

B-MMT-604(i) – 9Web Production (Multimedia Website)

B-MMT-604(ii)- Advertisement Production (Ad Campaign)

B-MMT-604(iii)-Animation Production (Animation Film)

B-MMT-604(iv)-Video Production (Short Film)

### **Process**

Each student will write his/her report according to the following format:

- Idea/concept of the project
- Treatment of the project
- Technical equipment used
- Workflow of the project
- Contribution of the student
- Main observations during the training
- Key points of learning

## **Evaluation and Viva-Voce**

During the specialization project, students will work under a supervisor to be decided by the production house. In the end of the project, supervisor will sign the report. As soon the project ends student will submit two copies of the report in the institute. The evaluation of the report will be done by the expert to be decided by the Director of the institute. Apart from evaluation of report, examiner will conduct a viva-voce for judging the knowledge of student.



## **B-MMT-605: Entrepreneurship (Theory)**

Time: 2 Hrs.

Credit: 1

Total Marks: 25

Theory: 20

Internal Assessment: 05

**Course Objectives: This course is designed to develop the knowledge about entrepreneurship in the growing multimedia industry.**

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-605.1:</b> Introduce the fundamental terms of entrepreneurship
<b>B-MMT-605.2:</b> Study of market challenges and risks
<b>B-MMT-605.3:</b> Learn the role of multimedia industry in entrepreneurship
<b>B-MMT-605.4:</b> Develop the knowledge and skills for market growth

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

### **Unit I**

- Meaning, definition and concept of Entrepreneurship
- Nature and scope of entrepreneurship
- Duties and Responsibilities of the entrepreneurs
- Challenges and risks in Entrepreneurship
- Entrepreneurship in new media
- Entrepreneurship in advertising and Public Relations-Press
- Entrepreneurship in entertainment Industry

### **Unit-II**

- Develop and polish a freelance pitch.
- Attitudes, behaviors, knowledge, and skills required for entrepreneurship
- Modern management theory and practice for planning, organizing, leading, and deploying human capital to maximize organizational and personal success.
- Technology behind multiple digital platforms.
- Managing budgets, vendors, workflow, production.

## **References**

- Funding Your Startup: And Other Nightmares Paperback by Dhruv Nath , Sushanto Mitra
- The DREAM Founder: Creating a Successful Start-up Paperback by Dhruv Nath
- Zero to One: Notes on Start Ups, or How to Build the Future Paperback by Peter Thiel , Blake Masters



## **B-MMT-606: Entrepreneurship (Practical)**

Time: 2 Hrs.

Credit: 1

Total Marks: 25

Practical: 20

Internal Assessment: 05

**Course Objectives: This course is designed to develop the knowledge about entrepreneurship in the growing multimedia industry.**

<b>Course Learning Outcomes:</b>
After completing the Course, the student will be able to:
<b>B-MMT-606.1:</b> Introduce the fundamental terms of entrepreneurship
<b>B-MMT-606.2:</b> Study of market challenges and risks
<b>B-MMT-606.3:</b> Learn the role of multimedia industry in entrepreneurship
<b>B-MMT-606.4:</b> Develop the knowledge and skills for market growth

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

<b>List of Practical Exercises:</b>
Students have to give a small business idea on the basis of market survey and also submit a report.

