SCHEME OF EXAMINATION
&
SYLLABUS
of
UG Programme (Interdisciplinary)
B.Sc. (Multimedia)

(Scheme: D)

As per National Education Policy 2020

(Multiple Entry-Exit, Internships and Choice Based Credit System)

w.e.f. Academic Session: 2024-2025

INSTITUTE OF MASS COMMUNICATION & MEDIA TECHNOLOGY
Kurukshetra University, Kurukshetra
(A++ Grade, NAAC Accredited)

under

Faculty of Commerce and Management
Kurukshetra University, Kurukshetra

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**5th**		
Name of the Course	**Interactive Courseware Designing**		
Course Code	B23-MMT-501		
Course Type	CC-A5		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the learning principles. CLO 2: Study the learning models for courseware designing. CLO 3: Learn the design process of courseware content for e-learning. CLO 4: Evaluate the courseware content and learning system.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
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	**15**
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	**15**
III	Courseware development life cycle Hypermedia authoring and publishing Adding audio-visual contents Creating self check exercises	**15**

	Evaluating the quality of Courseware	
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)	**15**
	Total Contact Hours	60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Multimedia Basics, Volume 1 b**y** Andreas Holzinger**,** Firewall Media.
- Fundamentals of Multimedia, Ze-Nian Li, Mark S. Drew, Pearson PrenticeHall, 2004
- Multimedia Basics, Suzanne Weixel, Jennifer Fulton, Karl Barksdale, CherylMorse, Bryan Morse, Thomson/Course Technology
- Malik and Agarwal, S. and A. (October 2012). "Use of Multimedia as a New Educational Technology Tool–A Study"(PDF). *International Journal of Information and Education Technology*.

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**5th**		
Name of the Course	**Social Media Marketing**		
Course Code	B23-MMT-502		
Course Type	CC-B5		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the basic fundamentals of digital marketing CLO 2: Understand the role of web media and search engines in marketing. CLO 3 : Implement the SEO and social media marketing. CLO 4: Develop and execute a marketing plan, incorporating all elements of the marketing mix.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
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	**15**
II	Introduction to SEO On-page SEO Vs Off-page SEO Use of keywords Keywords research and planning Site map, Social bookmarking	**15**
III	Social Media Optimization Social media marketing and tools Use of different social media platforms	**15**

	Blogging Video creation and sharing Content creation	
IV	Web Analytics Google AdSense Google Adwords E-mail marketing Facebook marketing X marketing Youtube marketing	**15**
	Total Contact Hours	60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- 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

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**5th**		
Name of the Course	**Applications of Multimedia**		
Course Code	B23-MMT-503		
Course Type	CC-C5		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Describe the types of media and define multimedia systems. CLO 2: Acquired knowledge in the various fields/areas of multimedia. CLO 3 : Develop the skills to apply multimedia tools in various industries / organizations. CLO 4: Learn about distribution of multimedia aids to the clients/audience.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Multimedia based presentations Concept of interactive learning material Multimedia networks: retail and banking business Application in interactive television Multimedia kiosks	**15**
II	Multimedia use in training and education Multimedia in distance learning Multimedia for marketing and advertising Multimedia use in museum and galleries	**15**
III	Concept generation of multimedia project Process and stages of multimedia production Multimedia production team member	**15**

	Implementation and distribution of multimedia products	
IV	Multimedia messaging service Gaming consoles and LAN gaming Multimedia in medical science education Multimedia in cinema production	**15**
	Total Contact Hours	60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Interactive Multimedia in Education and Training edited by Sanjaya Mishra, Ramesh C.
- Sharma; Idea Group Inc (IGI). Copyright.
- Multimedia technology and applications by Vincent W. S. Chow; Springer, 1997- 592
- Handbook of Research on Mobile Multimedia edited by Ismail Khalil Ibrahim; Idea Group Inc (IGI). Copyright.
- Computer Graphics and Multimedia: Applications, Problems and Solutions edited by John Di Marco; Idea Group Inc (IGI). Copyright.
- Interactive Multimedia Systems edited by Syed Mahbubur Rahman; Idea Group Inc (IGI). Copyright

Semester-VI

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**6th**		
Name of the Course	**Information Security**		
Course Code	B23-MMT-601		
Course Type	CC-A6		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Define what information is and appreciate the value of information. CLO 2: Understand the CIA triad of Confidentiality, Integrity and Availability. CLO 3 : Analyze and resolve security issues in networks and computer systems. CLO 4: Understanding of security, cryptography, system attacks and defenses against them.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction to security:** Basic concepts, classification of information security, need of information security, types of information security, security principles, security attacks, model for network security.	**15**
II	**Basic cryptography:** Basic cryptography terms, Encryption and Decryption, Symmetric crypto primitives, Modes of operation, Cryptographic hash functions, Asymmetric crypto primitives	**15**
III	**Identification and authentication:** Identification goals, Authentication requirements,Human authentication, Machine authentication, Authentication Mechanism, Passwords, PINs, Two stage authentication, Challenge -Response identification, Digital signature.	**15**

IV	**Network security:** Network threats, eavesdropping, spoofing, modification, denial of service attacks; Introduction to network security techniques: firewalls, virtual private networks, intrusion detection, Legal aspects of security, Privacy and ethics	**15**
	Total Contact Hours	60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Information Security: The Complete Reference, Second Edition; Mark Rhodes-OusleyMcGraw 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

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**6th**		
Name of the Course	**Video Production**		
Course Code	**B23-MMT-602**		
Course Type	CC-B6		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand video camera and its components. CLO 2: Knowledge of video production phases. CLO 3 : Understand the techniques of digital editing of a video. CLO 4: Knowledge of lighting Techniques. CLO 5 : Will be able to record a video and edit by using video editing softwares		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Origin of digital camera, Difference between roll and digital camera, HD, SD formats of HD and SD, Scanning, Interlacing Working of video camera, Basic technique of video camera Various components of video camera, Formats of video tapes	11
II	Types of video camera, Camera mountings Basic shots, Shot composition, Camera angles, Camera movements Camera control unit, White balance, Resolution, Aspect ratio	11
III	Concept and idea generation, writing proposal or synopsis for production Production stages: pre production, production, post production Television program formats – fictional and non fictional programs Production team members and their responsibilities	11

IV	Lighting equipment and control, lighting techniques and problems Editing grammar and aesthetics, editing equipment Structure of non-linear editing workstation	12
V	**Practicals:** o To study the various parts of a video camera o To study the video file formats and their conversion techniques o To study the ray diagram inside through the video camera o To study the functioning of a video camera o To study the operating buttons of a video camera o To study the output devices for watching video film o To record a video shoot by a video camera o To edit a video sequence in a video editing software o To make a rough cut of a film shoot on a timeline o To synchronize an audio clip with a video sample o To add texts on a video sample o To add chroma key to the video sample	30
	Total Contact Hours	75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practicum**	**10**	➢ **Practicum**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Videography: Video Media as Art and Culture, Sean Cubitt,Palgrave Macmillan, 15-Dec1993
- Visual Storytelling: Videography and Post Production in the Digital Age, Ronald J.
- Osgood, M. Joseph Hinshaw, WADSWORTH Incorporated FULFILLMENT, 29-Jan2013
- Video Production: Disciplines and Techniques, James C. Foust, Edward John Fink, Lynne S. Gross,Holcomb Hathaway, Incorporated

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**6th**		
Name of the Course	**Artificial Intelligence**		
Course Code	B23-MMT-603		
Course Type	CC-C6		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: helping learners to understand the world of AI and its applications CLO 2 :understand the basics of intelligent agents and learning types CLO 3 :learn the different components of AI such as natural language processing, expert system, neural network basics and knowledge representation CLO 4: learn about various application of AI in multimedia.		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Introduction to Artificial Intelligence Definition of artificial intelligence (AI) Brief history and evolution of AI Strong AI vs Weak AI. Turing Test and Intelligent Agents. Components of AI Applications of AI in various fields	**15**
II	Introduction to Machine Learning Classification of Machine Learning Application of Machine Learning Deep learning Knowledge representation techniques	**15**

	Neural Networks: ANN, RNN and CNN	
III	Introduction to NLP Text preprocessing techniques Introduction to expert system Introduction to robotics; Applications of AI in robotics Types of robots (industrial robots, autonomous vehicles, drones, etc.)	**15**
IV	AI applications in multimedia AI in Image Processing AI in Video Editing and Production AI in Animation and 3D Modelling AI in voice acting and dubbing AI in Design and Art Creation Ethics and Legal Implications of AI in Multimedia	**15**
	Total Contact Hours	60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- "Artificial Intelligence: A Modern Approach" by Stuart Russell and Peter Norvig
- "Deep Learning" by Ian Goodfellow, Yoshua Bengio, and Aaron Courville
- "Natural Language Processing with Python" by Steven Bird, Ewan Klein, and Edward Loper
- "Robotics: Modelling, Planning and Control" by Bruno Siciliano and Lorenzo Sciavicco
- "AI Superpowers: China, Silicon Valley, and the New World Order" by Kai-Fu Lee
- "Ethics of Artificial Intelligence and Robotics" edited by Vincent C. Müller and Nick Bostrom

Session: 2024-25			
Part A - Introduction			
Name of Programme	B.Sc. Multimedia		
Semester	**6th**		
Name of the Course	**Organization Portfolio**		
Course Code	B23-MMT-604		
Course Type	CC-M6		
Level of the course	300-399		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Define use of portfolio in marketing. CLO 2 :Understand the use of multimedia in portfolio development CLO 3 :create learning points for the portfolio designing CLO 4: Learn industry based standards and skills		
Credits	Theory	Tutorial	Total
	3	1	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B- Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
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	**15**
II	Electronic portfolio development Benefits of an electronic portfolio Designing an electronic portfolio Portfolio designing software Portfolio websites	**15**
III	Identifying types of learning Gathering of supporting documentation Portfolio building and submission Portfolio evaluation	**15**
IV	Use of a portfolio in the graphic arts Industry Preparation and presentation techniques	**15**

	Industry standards for portfolios Time management and multitasking	
	Total Contact Hours	60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- 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.