CSAOEUG(C) - MULTIMEDIA – 7034
CREDIT 3 : LTP (2:0:1)

Course Objectives

The objective of this course is to provide students with a basic understanding of multimedia systems and its components.

This course focuses on topics in multimedia information representation and multimedia standards in the components of multimedia – Text, audio, image, video and animation.

Provide information about the standards tools and techniques used in development of multimedia components for productions

Create simple multimedia applications and products for using standalone, networked or web based computers.

UNIT - I

Introduction To Multimedia , Needs and Areas of use, Identifying Multimedia Elements - Text, Images, Sound, Animation and Video, Making Simple Multimedia With PowerPoint.

TEXT - Concepts of Plain & Formatted Text, RTF & HTML Texts, Using Common Text Preparation Tools, Conversion to and From of Various Text Formats, Creating text using standard software.

UNIT - II

SOUND - Sound and its Attributes, Sound and Its Effects In Multimedia, Frequency, Sound Depth, Channels and its Effects on Quality and Storage, Size Estimation of Space of a Sound File, Sound Card Standard – FM Synthesis Cards, Waves Table Cards, MIDI and MP3 Files and Devices, 3D Sounds, Recording and editing sound using sound editors like Audacity, Sound forge etc.

UNIT - III

IMAGES - Importance of Images Graphics in Multimedia, Vector and Raster Graphics, Regular Graphics vs. Interlaced Graphics, Image Capturing Methods - Scanner, Digital Camera Etc. Color models-RGB, CYMK, Hue, Saturation, and Brightness, Various Attributes of Images Size, Color, Depth Etc, Various Image File Format BMP, DIB, CIF, PIC, and TIF Format Their Features And Limitations, Image format conversion, various effects on images. Create images using Photoshop, CorelDraw and apply various effects, Using Layers, Channels and Masks in images.

UNIT - IV

VIDEO- Basic of Video, Analog and Digital Video Type of Video , Digitization of Analog Video, Video Standard – NTSC, Pal, HDTV, Video Capturing Media /Instruments Videodisk Camcorder Compression Techniques, File Formats AVI, MJPG, MPEG, Video Editing and Movie Making Tools, converting formats of videos, recording and editing videos using video editing software like adobe premiere or Sony Vegas.

UNIT - V

ANIMATION- Concepts of animation, 2D and 3D animation, tools for creating animation, character and text animation, creating simple animation using GIF animator and flash, Morphing and Applications.

Authoring tools for Multimedia – Introduction to various types of multimedia authoring tools, CD/DVD based and web based tools, features and limitations, creating multimedia package using all components.

Course outcome

After completing the course student will be able to –

- Define multimedia and its components
- Create simple multimedia product that include all components
- Use standards software tools to develop multimedia components and integrate all components as per the requirement

Text & Reference books

- Introduction To Multimedia by Ramesh Bangia, Laxmi Publications Pvt. Ltd 2015
- Multimedia: Making It Work, Ninth Edition, by Tay Vaughan, Tata Mc-Graw Hill
- Introduction To Multimedia Systems, by Bhatnager G., Elsevier
- Level Introduction to Multimedia (M4.2-R4) by Satish Jain, Bpb Publications

CSAOEUG(G) - RDBMS USING MYSQL -7038
CREDIT 3 : LTP (2:0:1)

Course Objectives

- Establish a basic understanding of the analysis and design of a database.
- Establish a basic understanding of the process of Database Development and Administration using SQL.
- Enhance Programming and Software Engineering skills and techniques using SQL.
- Establish a basic understanding of background materials needed for technical support using SQL.

UNIT - I

Introduction to MySQL, Installing MySQL - MySQL Installation, Windows Installation, Linux RPM Installation, Linux Binary Installation, Source Installation

Starting and stopping MySQL - Four different methods to start MySQL in Linux, MySQL Stopping, Basic MySQL Queries, DML Queries, DDL Queries, TCL Queries, Types of Joins, Unions

Various logs in MySQL and its uses- MySQL Logs, Error Log, Query Log, Slow Query Log, Binlog and its format, Relay Log

UNIT - II

MySQL client Programs - MySQL Server/Client Architecture, MySQL Client Programs, MySQL Commands, MySQL Non-Client Programs, Upgrading MySQL, Why Upgradation? , Checklist MySQL Upgradation

Mysqladmin commands- MySQL Admin Commands, Workbench MySQL

Locking in MySQL- Locking in MySQL, Internal Locking, Table level Locking, Row level Locking, External Locking, Dead Lock

UNIT - III

MySQL Table maintenance - Table Maintenance, Analyze Table, Backup Table, Check Table, Checksum Table, Optimize Table, Repair Table, Restore Table, Moving Tablespace

Information Schema and Performance Schema - MySQL Information schema, Tables in Information schema, MySQL Performance schema

MSQL backup and Recovery- MySQL Backup, MySQL Backup Types, MySQL backup factors, MySQL Backup Tools, MySQL Dump, MySQL Recovery, MySQL Recovery Factors, Load data infile & select into outfile

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UNIT – IV

MySQL Replication and different Replication Architecture - MySQL Replication, MySQL Replication Architecture, MySQL Replication Basics, MySQL Replication Types, Master-Slave Replication Setup, Master-Slave Replication Filters, Master-Master Replication

MySQL User Management and Routines &Triggers - User Account Management, User Privileges, Administrative Privileges, Database Access Privileges, Creating and Rename User Account, Drop User Account, Grant Privileges, Revoke Privileges, Routines and Triggers

UNIT - V

MySQL Resource allocation - MySQL Memory Consumption, MySQL Memory Limitations,

Securing MySQL - Operating System Security, File System Security, Log Files & Security, Network Security, Optimizing queries, Identifying Candidate, Using EXPLAIN, Using Show Warnings

Course Outcome

Solve Database problems using Oracle 9i SQL by applying SQL commands to
- Create, Insert, Update, and Retrieve a simple database.
- Understand the services provided by a Database Management System.
- Understand the use and application of the Relational Database Model.
- Understand Transaction Processing and Multi-user Database support.
- Understand the difference between a Production transaction database and a Data Warehouse.
- Understand the Client/Server structures used in Database Management Systems.
- Design and Implement a basic database using the Oracle Database Management System.

Course	Subject	Marks			Credit
		T	P	I	
B.Sc.(MM)5	**Website Development**	-	40	10	3 (OE5)

Objectives:
- To understand Web Site Design Process.
- To learn the basics of Web page Design using flash & Dreamweaver

Unit 1: Introduction to web design and web layouts

Design – Design aesthetic, characteristics for various websites(commerce, edutainment, IT, entertainment, games, online communities, etc) introduction to interface ,types design and trends for different platforms, layouts for web- Symmetrical and asymmetrical layout ,Workflow for designing a site

Unit 2: Dreamweaver

Dreamweaver-Getting Started with Dreamweaver, Developing a Web Page, Working with Texts and Graphics, Image Placement, Aligning & Modifying, Page Properties. Link web content, using hyperlinks-mail links and named anchors ,Inserting rich media such as video, sound and animation in flash format, Importing tabular data to a web page, Creating Forms

Unit 3: Introduction to Flash

Flash: Getting started with macromedia Flash working with symbols and Interactivity, Creating animations, Crating special effects, Integration activity Insert and edit Macromedia Flash Movies in Dreamweaver.

Unit 4: Introduction to Java script and wordpress

Javascript Overview, syntax & conventions. Creating script, Hiding the script , Variables, Expressions, Branching & Looping statements, Objects, Events & Document Object Model - on Click, onMouseOver, onSubmit, on Focus, onChange, onBlur, OnLoad, onUnload, Alerts, Prompts & Confirms. Introduction to opensource software(wordpress).

Unit 5: Website Management and publishing

Choosing a domain name, components including domain extensions. Selecting a hosting company - business vs. personal. Understand the process of uploading, downloading a web site to from a web server. Using hosting management tools through the browser .Preparing to publish including adding meta tags to pages and general testing. Different types of FTP tools. Connecting to your host and transferring files effectively. Setting permissions on certain files to assist with security on your site. Understand the term copyright and its implications for text, images, audio, video available on websites.

Assignment
1. design a web site using Dreamweaver
2. embed a java script on to a web page

Text Books and Reference :
1. Learning Dreamweaver Cs 5 Paperback – by Bangia
2. Dreamweaver CS5 in Simple Steps Paperback – by Kogent Learning Solutions Inc.
3. Javascript: the Complete Reference Paperback – by Thomas Powell (Author), Fritz Schneider (Author)
4. Javascript Testing: Beginner'S Guide Author : Eugene Publisher : Shroff - Packt Publishing ISBN13 : 9789350232644,ISBN10 : 9350232642
5. WordPress: The Missing Manual, 2/e Paperback – 2014 by Matthew MacDonald (Author) Publisher: Shroff/O'Reilly; Third Edition edition (2014)ISBN-10: 935110706X; ISBN-13: 978-9351107064

OE — 4269

4269

Course	Animation Technology	Marking Scheme			Credits
		T	P	I	3
BSc(GA)5		40	-	10	(OE5)

Objectives:

- To learn the basic elements and process of Animation
- To understand the basics of 2D & 3D animation.

Unit 1: Introduction of Animation

Definition, History, Principles, Uses, Animation for WEB, 2D versus 3D Animation.

Unit 2: Process of Animation

Concept Development, Story Developing, Audio &Video, Color Theory, Device Independent Color Model, 3D Animated Movies.

Unit 3: Features of Animation Software

Animation by the computer, Introduction to various animation software, Features of animation software, animation file formats, frame, key frame, modeling, 2D Animation and its concepts. Script Animation Usage, Different Language of Script Animation among the Software.3D Rendering, Motion Caption, Formats, Methods – Usages, Expression, Motion, Capture Software's.

Unit 4: Introduction of 2D Animation

Definition, Concept, Types – Traditional Hand drawn animation, Stop Motion Animation, Flip Book, Digital animation, Key frames, In between Frames, Time Sliders, Software of 2D animation, File Formats of 2D animation – Video File formats, File Formats for web.

Unit 5: Introduction to 3D Animation

3D Animation & its Concepts – Types of 3D Animation, Skeleton & Kinetic 3D Animation, Texturing & Lighting of 3D Animation , Applications & Software of 3D Animation.

Assignments:

1. Create small animation clip in 2D.
2. Create a lamp model in 3D.

Text Books and References:

1. Principles of Multimedia – Ranjan Parekh, 2007, TMH. (Unit I, Unit V)
2. Multimedia Technologies – Ashok Banerji, Ananda Mohan Ghosh – McGraw Hill
3. Multimedia Making it Work –Toy Voughan - 7th edition, Tata McGraw Hill

OE - 4337

OE Paper 03 : Communication Technology
(3 Credits)

Unit-1 : Introduction to Technologies of Mass Communication

1. Printing, Photography

2. Audiography, Videography

3. Cinematography

Unit-2 : Television Technology

1. Television Broadcasting : NTSC, PAL and SECAM

2. Conditional Access system, Pay per view system

3. Set top box, Characteristics of LED, Plasma screen HDTV, LCD

Unit-3 : Types of Radio

1. FM and AM

2. Satellite and Web Radio

3. Community Radio, Mobile Radio

Unit-4 : Media Technology

1. Direct to Home (DTH), Benefits of Fiber optics cable

2. Convergence Media

3. World Wide Web

Unit-5 : Sound Technology

1. Microphones : Techniques & Types

2. Sound Mixing Machines

3. Process of Satellite signal

विभागाध्यक्ष
(जन संचार)

RURAL COMMUNICATION

UNIT-1 Introduction to Rural India	L	T	S	W	D	V	P	T
1.1 Socio - economic structure of villages	3	-	-	-	-	-	-	3
1.2 Social change in village community	3	-	-	-	-	-	1	4
1.3 Impact of globalization and urbanization on villages	3	-	-	-	-	-	-	3
1.4 Problems of rural society	3	-	-	-	-	-	2	5
1.5 Rural Community Assessments (Population of Rural – Urban)	3	-	-	-	-	-	1	4

UNIT -2 Govt. Policies for Rural Development	L	T	S	W	D	V	P	T
2.1 Five Year Plans and villages	3	-	-	-	-	-	-	3
2.2 Zamindari abolition and land reforms	3	-	-	-	-	-	1	4
2.3 Co-operative movement	3	-	-	-	-	-	-	3
2.4 Community development Programme	3	-	-	-	-	-	2	5
2.5 Panchayti Raj and rural development	3	-	-	-	-	-	1	4

UNIT-3 History of Rural Broadcast	L	T	S	W	D	V	P	T
3.1 Issues of development - Health, Education, Infrastructure, Livelihoods etc.	3	-	-	-	-	-	-	3
3.2 Social conflicts, empowerment of weaker sections.	3	-	-	-	-	-	1	4
3.3 AIR's developmental programmes.	3	-	-	-	-	-	-	3
3.4 Krishi Darshan of DD.	3	-	-	-	-	-	2	5
3.5 SITE project.	3	-	-	-	-	-	1	4

UNIT -4 Programming for Rural Development	L	T	S	W	D	V	P	T
4.1 Concept of public service broadcast	3	-	-	-	-	-	1	4
4.2 Impact of broadcast on development	3	-	-	-	-	-	-	3
4.3 Planning and scheduling of development programmes	3	-	-	-	-	-	2	5
4.4 Field generated programme.	3	-	-	-	-	-	1	4
4.5 Area specific programmes of DD.	3	-	-	-	-	-	1	4

UNIT-5 Future of Rural Broadcast	L	T	S	W	D	V	P	T
5.1 Concept of local broadcast	3	-	-	-	-	-	-	3
5.2 FM radio and rural broadcast	3	-	-	-	-	-	1	4
5.3 Interactive and participatory programmes	3	-	-	-	-	-	2	5
5.4 Satellite radio	3	-	-	-	-	-	1	4
5.5 Community radio	3	-	-	-	-	-	-	3

विभागाध्यक्ष (इ.एम.)

Multimedia Technology

Course		Marking Scheme			Credits
		T	P	I	3
BTech(PP)6		40	-	10 (OE6)	

Objective: Multimedia technology gets knowledge about Graphic and Animation, Audio, Video, HTML.

Unit I: Multimedia

Components of Multimedia, Interaction Devices, Text: Introduction and Implications of Digital Text, Font, Character Codes, Formatting Aspect Text, Hypertext and Hypermedia.

Unit II: Image and Audio

Introduction of image- representation, Acquisition, Picture display, Color and Brightness, scanning, Iconography, Basic Image Editing Steps and File format.

Introduction of Audio-Digital Audio, Sample, sample rate, Digital Audio editing and representation, pitch, Volume, Amplitude and Frequency, Audio File Format, Audio compression.

Unit III: Graphics and Animation

Design of statistical and schematic data, Cartography. Animation:-Animation principles, Types, Frame rate, Animation file formats, Introduction of Flash-Timeline, Frame based Animation, Tween-Based Animation, Layers, Action Script, File Formats.

Unit IV: Video

Video capture, Analog video vs. digital video, Video formats and standards, Video compression, Video Editing.

Unit V: HTML5, JavaScript, eBooks

Introduction HTML5: Tags, web page, Frame, Form, Table, Image and Embedding media; Introduction Java script: syntax & conventions. Creating script, Hiding the script , Variables, Expressions, Branching & Looping statements, Functions, Arrays Objects, Events & Document Object Model – on Click, on Mouse Over, on Submit, on Focus, on Change, on Blur, On Load, on

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Unload, Alerts, Prompts & Confirms; Introduction of e-books: e-book reading devices, e-book reader software, applications and formats.

Assignments/Practical Work:

1. Multimedia and related component
2. Introduction of File format (Audio & Video)
3. Design of graphics & animation
4. Introduction of Flash player
5. Introduction of HTMT 5 with application & format

Text & Reference books:

1. Multimedia Technologies, Ashok Banerji
2. Multimedia: Making It Work,7/E Tay Vaughan
3. HTML the complete Reference 2014
4. HTML and CSS Thomas Powell 2016

OE - 4825

BBA - E-COMMERCE
OE-6: Customer Relationship Management

Unit-	Introduction
1.1	CRM and e-CRM
1.2	Define Customer & e-Customer
1.3	Correspondents of CRM, e-CRM
1.4	Goal of CRM, feature of e-CRM
1.5	Customer life Style & Technology

Unit-	CRM Process
2.1	CRM Process
2.2	Online CRM Process
2.3	4C's of CRM Process
2.4	Modules in CRM
2.5	CRM for different organizations

Unit-	CRM Strategy
3.1	CRM in business Strategy
3.2	Understanding Service quality : Technical/Functional
3.3	Dimensions of Service quality
3.4	Managing Customer Communication
3.5	Customer Support Methodology

Unit-	CRM Implementation
4.1	Choosing the right CRM Solution
4.2	CRM Implementation Process
4.3	Five Phases of CRM Projects.
4.4	Enterprise Resource Planning Preview & Benefits
4.5	ERP & Related Technologies

Unit-5	Sales Force Automation & Business
5.1	SFA : Sales Process Activity
5.2	Contact lead & Knowledge Management
5.3	Field Force Automation
5.4	E-Commerce Automation
5.5	Impact of CRM on Marketing