

## LESSON PLAN

Type	Code		L-T-P	Credits	Marks
	CORE COURSE- XIV	<b>Multimedia &amp; Applications</b>	3-1-0	4	100
<b>Topic Objective</b>	To teach the principles of how different types of media can be processed and presented by computers. It introduces how multimedia can be used in various application areas. It provides a solid foundation to the students so that they can identify the proper applications of multimedia, evaluate the appropriate multimedia systems and develop effective multimedia applications.				
<b>Prerequisites</b>	Student must have basic computer knowledge.				
<b>Lecture Scheme</b>	Regular lectures (classroom/virtual class with computer/Smartphone) with use of ICT as and when required, lectures are planned to be interactive with focus on problem solving activities.				

### Evaluation Scheme

Internal Assessment			Written Assessment	Total
Assignment(s)	Unit Test	Mid-Term (Written)	End-Term	
0	0	30	70	100

### University Syllabus

Unit No	Topics	Hours	
Unit-1	Multimedia: Introduction to multimedia, components, uses of multimedia, multimedia applications, virtual reality. Text: Fonts & Faces, Using Text in Multimedia, Font Editing & Design Tools, Hypermedia & Hypertext.	8	
Unit-2	Images: Still Images – bitmaps, vector drawing, 3D drawing & rendering, natural light & colors, computerized colors, color palettes, image file formats. Sound: Digital Audio, MIDI Audio, MIDI vs Digital Audio, Audio File Formats.	8	
Unit-3	Video: How video works, analog video, digital video, video file formats, video shooting and editing. Animation: Principle of animations, animation techniques, animation file formats.	8	
Unit-4	Internet and Multimedia: www and HTML, multimedia on the web – web servers, web browsers, web page makers and site builders.	8	
Unit-5	Making Multimedia: Stages of a multimedia project, Requirements to make good multimedia, Multimedia Hardware - Macintosh and Windows production Platforms, Hardware peripherals - Connections, Memory and storage devices, Multimedia software and Authoring tools.	8	
<b>Total (Hours)</b>			<b>40</b>

Text Books:

TB1: **Tay Vaughan**, —Multimedia: Making it work, TMH, Eighth edition

TB2: **Ralf Steinmetz and KlaraNaharstedt**, —Multimedia: Computing, Communications Applications||,  
Pearson

Online Resources:

OR1: <https://www.omicsonline.org/conferences-list/multimedia-tools-and-applications>

OR2: <https://www.slideshare.net>

OR3: <https://www.ftms.edu.my>

Type	Code	LESSON PLAN Multimedia & Applications	L-T-P	Credits	Marks
Lecture No	Unit No		3-1-0	4	75
Lecture 1	1	<b>Topic:</b> Discuss about concept of multimedia <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 2	1	<b>Topic:</b> components of multimedia <b>Ref:</b> TB1 ; TB2; OR2;OR3			
Lecture 3	1	<b>Topic:</b> Discuss about uses of multimedia <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 4	1	<b>Topic:</b> concept of virtual reality <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 5	1	<b>Topic:</b> Text: Fonts & Faces <b>Ref:</b> TB1 ; TB2; OR2;OR3			
Lecture 6	1	<b>Topic :</b> Using Text in Multimedia <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 7	1	<b>Topic :</b> Font Editing & Design Tools <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 8	1	<b>Topic :</b> Hypermedia & Hypertext. <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 9	2	<b>Topic :</b> Still Images <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 10	2	<b>Topic:</b> bitmaps, vector drawing <b>Ref:</b> TB1 ; TB2; OR2;OR3			
Lecture 11	2	<b>Topic: :</b> 3D drawing & rendering <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 12	2	<b>Topic:</b> natural light & colors <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 13	2	<b>Topic:</b> image file formats. Sound <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 14	2	<b>Topic:</b> Digital Audio, MIDI Audio <b>Ref:</b> TB1 ; TB2; OR2.			
Lecture 15	2	<b>Topic:</b> MIDI Audio <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 16	2	<b>Topic:</b> MIDI vs Digital Audio, Audio File Formats <b>Ref:</b> TB1 ; TB2; OR2			
Lecture 17	3	<b>Topic:</b> Video: How video works <b>Ref:</b> TB1 ; TB2; OR2			

Lecture 18	3	<b>Topic:</b> analog video <b>Ref:</b> TB1 ; TB2; OR2
Lecture 19	3	<b>Topic:</b> digital video <b>Ref:</b> TB1 ; TB2; OR2
Lecture 20	3	<b>Topic:</b> video file formats <b>Ref:</b> TB1 ; TB2; OR2,OR1
Lecture 21	3	<b>Topic:</b> video shooting and editing <b>Ref:</b> TB1 ; TB2; OR2,OR1
Lecture 22	3	<b>Topic:</b> Animation: Principle of animations. <b>Ref:</b> TB1 ; TB2; OR2
Lecture 23	3	<b>Topic:</b> animation techniques <b>Ref:</b> TB1 ; TB2; OR2
Lecture 24	3	<b>Topic:</b> animation file formats. <b>Ref:</b> TB1 ; RB1; OR1,
Lecture 25	4	<b>Topic:</b> Internet and Multimedia <b>Ref:</b> TB1 ; TB2; OR2,OR1
Lecture 26	4	<b>Topic:</b> www and HTML, <b>Ref:</b> TB1 ; TB2; OR2;OR1
Lecture 27	4	<b>Topic:</b> multimedia on the web <b>Ref:</b> TB1 ; TB2; OR2
Lecture 28	4	<b>Topic:</b> web servers <b>Ref:</b> TB1 ; TB2; OR2;OR1
Lecture 29	4	<b>Topic:</b> web browsers <b>Ref:</b> TB1 ; TB2; OR2
Lecture 30	4	<b>Topic:</b> multimedia on the web <b>Ref:</b> TB1 ; TB2; OR2
Lecture 31	4	<b>Topic:</b> web page makers <b>Ref:</b> TB1 ; TB2; OR2;OR3
Lecture 32	4	<b>Topic:</b> site builders. <b>Ref:</b> TB1 ; TB2; OR2
Lecture 33	5	<b>Topic:</b> Making Multimedia <b>Ref:</b> TB1 ; TB2; OR2
Lecture 34	5	<b>Topic:</b> Stages of a multimedia project <b>Ref:</b> TB1 ; TB2; OR2
Lecture 35	5	<b>Topic:</b> Requirements to make good multimedia <b>Ref:</b> TB1 ; TB2; OR2;OR3
Lecture 36	5	<b>Topic:</b> Multimedia Hardware <b>Ref:</b> TB1 ; TB2; OR2
Lecture 37	5	<b>Topic:</b> Macintosh and Windows production Platforms, <b>Ref:</b> TB1 ; RB1; OR1
Lecture 38	5	<b>Topic:</b> Hardware peripherals – Connections <b>Ref:</b> TB1 ; TB2; OR2
Lecture 39	5	<b>Topic:</b> Memory and storage devices <b>Ref:</b> TB1 ; TB2; OR2
Lecture 40	5	<b>Topic:</b> Multimedia software and Authoring tools. <b>Ref:</b> TB1 ; TB2; OR2;OR3

## LESSON PLAN

Type	Code	E-commerce	L-T-P	Credits	Marks
CS	DSE-III		3-1-0	4	100
<b>Topic Objective</b>	The objective of this course is to meet the altering & challenging needs of society in the field of <b>e-commerce</b> Online transactions by innovation, problem solving, eradicating threats, to make Cyber world safer, better managed and easy for the common man, <b>E-commerce</b> companies.				
<b>Prerequisites</b>	Basic HTML text editors (like Notepad++) to more complex graphic authoring tools and CMS (content management system) with built-in frameworks and debugging tools. Html files are created by Dream weaver along with the <b>CSS</b> (cascading style sheet) which enhance the visual appearance of the site.				
<b>Lecture Scheme</b>	Regular lectures (classroom/virtual class with computer/Smartphone) with use of ICT as and when required, lectures are planned to be interactive with focus on Html programming.				

### Evaluation Scheme

Internal Assessment			Written Assessment	Total
Assignment(s)	Unit Test	Mid-Term (Written)	End-Term	
0	0	30	70	100

### University Syllabus

Unit No	Topics	Hours
Unit-1	An introduction to Electronic commerce: What is E-Commerce (Introduction And Definition), Main activities E-Commerce, Goals of E-Commerce, Technical Components of E-Commerce, Functions of E-Commerce, Advantages and disadvantages of E- Commerce, Scope of E-Commerce, Electronic Commerce Applications, 9 Electronic Commerce and Electronic Business(C2C)(C2G,G2G, B2G, B2P, B2A, P2P, B2A, C2A, B2B, B2C).	06
Unit-2	The Internet and WWW: Evolution of Internet, Domain Names and Internet Organization (.edu, .com, .mil, .gov, .net etc.) , Types of Network, Internet Service Provider, World Wide Web, Internet & Extranet, Role of Internet in B2B Application, building own website, Cost, Time, Reach, Registering a Domain Name, Web promotion, Target email, Baner, Exchange, Shopping Bots.	07
Unit-3	Internet Security: Secure Transaction, Computer Monitoring, Privacy on Internet, Corporate Email privacy, Computer Crime( Laws , Types of Crimes), Threats, Attack on Computer System, Software Packages for privacy, Hacking, Computer Virus( How it spreads, Virus problem, virus protection, Encryption and Decryption, Secret key Cryptography, DES, Public Key Encryption, RSA, Authorisation and Authentication, Firewall, Digital Signature( How it Works).	07
Unit-4	Electronic Data Exchange: Introduction, Concepts of EDI and Limitation, Applications of EDI, Disadvantages of EDI, EDI model,Electronic Payment System: Introduction, Types of Electronic Payment System, Payment Types, Value Exchange System, Credit Card System, Electronic Fund Transfer, Paperless bill, Modern Payment Cash, Electronic Cash.	13

Unit-5	Planning for Electronic Commerce: Planning Electronic Commerce initiates, Linking objectives to business strategies, Measuring cost objectives, Comparing benefits to Costs, Strategies for developing electronic commerce web sites.	07
	Total (Hours)	40

Text Books:

TB1: G.S.V.Murthy Himalaya Publishing House

TB2: Kamlesh K Bajaj and Debjani Nag

Reference Books:

RB1: Gray P. Schneider

RB2: : Chand (Wiley) Web and E-Commerce

Online Resources:

OR1: <https://www.slideshare.net/richardmeriveles/lesson-1-ecommerce>

OR2: <https://nptel.ac.in/content/storage2/courses/106108103/pdf/PPTs/mod13.pdf>

OR3: [https://www.tutorialspoint.com/e\\_commerce/e\\_commerce\\_edi.htm](https://www.tutorialspoint.com/e_commerce/e_commerce_edi.htm)

OR4: <https://www.slideshare.net/webhostingguy/planning-for-ecommerce-ism-4480>

OR5: [https://www.tutorialspoint.com/e\\_commerce/e\\_commerce\\_security.htm](https://www.tutorialspoint.com/e_commerce/e_commerce_security.htm)

Type	Code	LESSON PLAN	L-T-P	Credits	Marks
Lecture No	Unit No	<b>E-commerce</b>	3-1-0	4	75
Lecture 1	1	<b>Topic:</b> An introduction to Electronic commerce: What is E-Commerce (Introduction And Definition), Main activities E-Commerce, Goals of E-Commerce. <b>Ref:</b> RB1(1.2-1.5, pg2-6); OR1			
Lecture 2	1	<b>Topic:</b> Technical Components of E-Commerce, Functions of E-Commerce, Advantages and disadvantages of E- Commerce <b>Ref:</b> RB1(1.7-1.11, pg10-18); OR1			
Lecture 3	1	<b>Topic:</b> Main activities E-Commerce. <b>Ref:</b> OR1			
Lecture 4	1	<b>Topic:</b> Scope of E-Commerce, Electronic Commerce Applications., <b>Ref:</b> RB1(2.3-2.06, pg20-25); OR1			
Lecture 5	1	<b>Topic:</b> Electronic Commerce and Electronic Business(C2C)(C2G) <b>Ref:</b> RB2(2.4-2.10, pg10-18); OR1			
Lecture 6	1	<b>Topic:</b> G2G, B2G, B2P <b>Ref:</b> RB1(4.7-4.9., pg38-40); OR2			
Lecture 7	1	<b>Topic:</b> B2A, P2P, B2A, C2A, B2B, B2C <b>Ref:</b> RB1(5.2-5.5, pg-57); OR2			
Lecture 8	1	<b>Topic:</b> The Internet and WWW: Evolution of Internet, <b>Ref:</b> RB1(3.4, pg88-91); OR2			
Lecture 9	1	<b>Topic:</b> Domain Names and Internet Organization (.edu, .com, .mil, .gov, .net etc.). <b>Ref:</b> RB2(3.9 pg37-43); OR2			
Lecture10	1	<b>Topic:</b> Types of Network, Internet Service Provider, World Wide Web, Internet & Extranet <b>Ref:</b> RB2(3.2, pg46-55); OR3			
Lecture11	2	<b>Topic:</b> Cost, Time, Reach, Registering a Domain Name			

		<b>Ref:</b> RB2(3.7, pg63-70); OR3
Lecture12	2	<b>Topic:</b> Web promotion, Target email, Baner <b>Ref:</b> RB2(3.9, pg72-80); OR3
Lecture13	2	<b>Topic:</b> Exchange, Shopping Bots. <b>Ref:</b> OR3
Lecture14	2	<b>Topic:</b> Internet Security: Secure Transaction, Computer Monitoring, Privacy on Internet. <b>Ref:</b> OR3
Lecture15	2	<b>Topic:</b> Corporate Email privacy, Computer Crime( Laws , Types of Crimes), <b>Ref:</b> OR3,OR2
Lecture16	2	<b>Topic:</b> Threats, Attack on Computer System, Software Packages for privacy, <b>Ref:</b> OR3
Lecture17	2	<b>Topic:</b> Hacking, Computer Virus( How it spreads, Virus problem, virus protection. <b>Ref:</b> OR3
Lecture18	2	<b>Topic:</b> Encryption and Decryption, Secret key Cryptography, DES, Public Key Encryption. <b>Ref:</b> OR3
Lecture19	2	<b>Topic:</b> RSA, Authorization and Authentication <b>Ref:</b> RB1(3.11, pg 58-62); OR3
Lecture20	2	<b>Topic:</b> Firewall, Digital Signature( How it Works). <b>Ref:</b> RB1(3.10, pg 72-74); OR3
Lecture21	3	<b>Topic:</b> Electronic Data Exchange: Introduction, <b>Ref:</b> RB2(3.11-, pg 93-98); OR4
Lecture22	3	<b>Topic:</b> Disadvantages of EDI, EDI model,Electronic Payment System: <b>Ref:</b> RB1(4.4-4.8, pg 100-101); OR2
Lecture23	3	<b>Topic:</b> Introduction, Types of Electronic Payment System, Payment Types,. <b>Ref:</b> RB1(4.10, pg 122-127); OR4
Lecture24	3	<b>Topic:</b> Value Exchange System, Credit Card System <b>Ref:</b> RB2(5.2, pg 167-168); OR4
Lecture25	3	<b>Topic:</b> Electronic Fund Transfer, <b>Ref:</b> RB2(5.08- pg 169-172); OR4
Lecture26	3	<b>Topic:</b> Paperless bill, <b>Ref:</b> RB1(5.10, pg 172-180); OR4
Lecture27	3	<b>Topic:</b> Modern Payment Cash, <b>Ref:</b> RB1(5.11, pg 181-184); OR4
Lecture28	3	<b>Topic:</b> Concepts of EDI and Limitation, <b>Ref:</b> RB2(5.16-5.17, pg 166-168); OR4
Lecture29	3	<b>Topic:</b> Applications of EDI. <b>Ref:</b> RB1(5.4-5.5, pg 129-131); OR4
Lecture30	3	<b>Topic:</b> Electronic Cash. <b>Ref:</b> RB2(5.6, pg 133-135); OR4
Lecture31	4	<b>Topic:</b> Planning for Electronic Commerce: <b>Ref:</b> RB2(5.7, pg 112-123); OR4
Lecture32	4	<b>Topic:</b> Planning Electronic Commerce initiates, <b>Ref:</b> RB1(5.8, pg 140-142); OR4
Lecture33	4	<b>Topic:</b> Linking objectives to business strategies <b>Ref:</b> RB1(5.9, pg 143-145); OR5

Lecture34	4	<b>Topic:</b> Measuring cost objectives <b>Ref:</b> RB1(7.1, pg 191-192); OR5
Lecture35	4	<b>Topic:</b> Comparing benefits to Costs <b>Ref:</b> RB1(8.5, pg 194-196); OR5
Lecture36	4	<b>Topic:</b> Strategies for developing electronic commerce web sites <b>Ref:</b> RB1(9.6, pg 424-428); OR5
Lecture37	4	<b>Topic:</b> Strategies for developing electronic commerce web sites <b>Ref:</b> OR5
Lecture38	4	<b>Topic:</b> Developing demo shopping website <b>Ref:</b> OR5
Lecture39	4	<b>Topic:</b> Developing demo shopping website <b>Ref:</b> RB2(7.10, pg 378-401); OR5
Lecture40	4	Doubt class and Previous year Questions and answer discussion