

## Detailed Syllabus Lecture-wise Breakup

<b>Subject Code</b>	10B22CI621	<b>Semester Even</b>	<b>Semester Sixth Session 2014- 2015</b> <b>Month from January to Jun</b>
<b>Subject Name</b>	Information System		
<b>Credits</b>	4	<b>Contact Hours</b>	4
<b>Faculty (Names)</b>	<b>Coordinator(s)</b>	1. Anuja Arora	
	<b>Teacher(s) (Alphabetically)</b>	1. Anuja Arora	
<b>Module No.</b>	<b>Subtitle of the Module</b>	<b>Topics in the module</b>	<b>No. of Lectures for the module</b>
1.	Introduction	Information System Architecture, Classification of Information Systems, Functional Area Application, Case studies on Requirement Analysis of Information systems: (i) Environmental health information system for public health service, (ii) Web spatial Decision support system, (iii) Decision support system model for forecasting Inventory management using probabilistic multidimensional data model, (iv) Conceptual model for decision support system based business intelligence OLAP tool for university in context of E-learning, (v) GIS as a powerful tool for effective disaster management, (vi) Nutrient management decision support system for livelihood security of farmers, (vii) Support for real time decision making in mobile financial application  Overview of Information System Content Management Environments e.g. Drupal	8
2.	Building IS using Single thin client  Building IS using Multiple Thin Client  Building IS using Multiple Rich Client	Information System user interface designing using Servlet, Java Server Pages  Building multiple clients of IS using Servlet and JSP Session Handling, Maintaining log files of User Sessions Activities (Using Writer and Logger API )  Designing IS Decision support reports with rich graphics using Advanced Window toolkit (Working with Windows, Graphics and Text), Using AWT Controls, Layout Managers, Menus, Images , Swing Fundamentals, Open XLS java Spreadsheet API (Data importing,	13

		Exporting, Data analysis, Adding Cells, Cell Movement, Charts, Copy Sheets, Formats, form Controls, formulas, JChart, Grouping , Splitting )	
3.	<p>Building IS using Modular Multiple Rich Client</p> <p>Building IS using Modular Multiple Rich Client with Multiple GUI Support</p> <p>Building IS using Secure Modular Multiple Rich client with Multiple GUI Support</p> <p>Building IS using Secure Modular Multiple Rich Client Web Application With Distributed Access</p> <p>Building mobile based IS</p>	<p>Building IS Three Tier Architecture using Message Driven, Entity Bean, Session Bean, Decorator Pattern, Observer Pattern, Factory Pattern, Singleton Pattern, Command Pattern, Façade Pattern, strategy Pattern</p> <p>Internationalization (e.g. multi language support, locations specific layout)</p> <p>Symmetric –Asymmetric Encryption API, Digital Signature, Digital Certificate, Message Integrity API , Implementing Authentication (HTTP authentication, Form Based authentication, Client-Certificate Authentication), Authorization using container and programmatic approach</p> <p>Web Services</p> <p>Building information system for mobile environment using Android software development kit</p>	21
<b>Total number of Lectures</b>			<b>42</b>

<b>Recommended Reading material:</b> Author(s), Title, Edition, Publisher, Year of Publication etc. ( Text books, Reference Books, Journals, Reports, Websites etc. in the IEEE format)	
1.	Herbert Schildt “The Complete Reference: JAVA, Tata McGraw- Hill
2.	Phil Hanna,” The Complete Reference: JSP 2.0” Tata McGraw-Hill
3.	Henry F Korth, Abraham Silberschatz, S. Sudurshan “Database system concepts”, 4 <sup>th</sup> Edition, McGraw-Hill
4.	Kathy Sierra & Bert Bates “ Head First EJB”, O’Reilly
5.	Kenneth C. Laudon , Janes P. Laudon “ Management Information Systems” , Ninth Edition, PHI
6.	Chet Haase, Romain Guy, “Filthy Rich Clients”, Pearson Education
7.	“Oracle 9i manuals”
8.	ACM Transactions on Database Systems,
9.	International Journal of Enterprise Information Systems, Published by Idea Group Inc. ISSN (printed): 1548-1115. ISSN (electronic): 1548-1123
10.	ACM Transactions on the Web (TWEB).
11.	ACM Transactions on the Information Systems (TOIC

12.	ACM Transactions on Graphics (TOG).
13.	ACM Transactions on Internet Technology (TOIT).
14.	Information System frontiers (2008) by Springer Science
15.	Information System and e-business management by Springer