

M.L.Dhanukar College of Commerce

Teaching Plan: 2017 – 18

Department: Information Technology

Semester: V

Class: T.Y.BScIT

Subject: Network Security

Name of the Faculty: Ms.Shruti Save

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Unit I Computer Security <ul style="list-style-type: none">• Introduction• Need for security• Principles of Security• Types of Attacks Cryptography <ul style="list-style-type: none">• Plain text and Cipher text• Substitution techniques• Caesar Cipher, Mono-alphabetic Cipher, Polygram, Poly-alphabetic Substitution, Playfair, Hill Cipher, Transposition techniques• Encryption and Decryption• Symmetric and Asymmetric Cryptography• Steganography• Key range and key size• Possible types of attacks		16
July	Unit III Asymmetric Key Algorithms <ul style="list-style-type: none">• Overview of Asymmetric cryptography• RSA algorithm• Symmetric and Asymmetric cryptography together• Digital Signature• Knapsack algorithm UNIT IV Digital Certificated and Public Key Infrastructure <ul style="list-style-type: none">• Digital Certificates• Private key management• Public key Cryptography		20

	<ul style="list-style-type: none"> • PKI and security • Hash functions • Blom's scheme • Diffie-Hellman key Exchange • Kerberos • The Station-to-Station Protocol 		
August	<p>Unit V</p> <p>Internet Security Protocols</p> <ul style="list-style-type: none"> • Secure Socket Layer(SSL) • Time Stamping Protocol • Secure Electronic Transaction(SET) • E-mail Security • Wireless Application Protocol <p>Firewalls and Virtual Private Networks</p> <ul style="list-style-type: none"> • Firewalls • IP Security • Virtual Private Network • Intrusion 	CLASS TEST	16
September	<p>UNIT II</p> <p>Symmetric Key Algorithms</p> <ul style="list-style-type: none"> • Algorithms types and modes • Data Encryption Standard(DES) • Blowfish • RC4,RC5 • Symmetric Key Algorithms • International Data Encryption Algorithm (IDEA) • Advanced Encryption Standard <p>UNIT VI</p> <p>User Authentication and Kerberos</p> <ul style="list-style-type: none"> • Authentication Basics • Passwords • Tokens • Certificate-based Authentication • Biometrics • KDC • Single Sign On 		20

Sign of Faculty

Sign of Coordinator

M.L. Dahanukar College of Commerce

Teaching Plan: 2017 - 18

Department: I.T.

Class: T.Y.B.Sc.(I.T.)

Semester:V

Subject: ASP.NET WITH C#

Name of the Faculty: : Sujata Patil

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Review of .NET frameworks , Introduction to C#, Variables and expressions, flow controls, functions, debugging and error handling, OOPs with C#, Defining classes and class members. Assembly, Components of Assembly, Private and Shared Assembly, Garbage Collector, JIT compiler. Namespaces Collections, Delegates and Events.		20
July	Introduction to ASP.NET 4: Microsoft.NET framework, ASP.NET lifecycle. CSS: Need of CSS, Introduction to CSS, Working with CSS with visual developer. ASP.NET server controls: Introduction, How to work with button controls, Textboxes, Labels, checkboxes and radio buttons, list controls and other web server controls, web.config and global.asax files.		20
August	Programming ASP.NET web pages: Introduction, data types and variables, statements, organizing code, object oriented basics. Validation Control: Introduction, basic validation controls, validation techniques, using advanced validation controls. State Management: Using view state, using session state, using application state, using cookies and URL encoding.	Class Test	25
September	Master Pages: Creating master pages, content pages, nesting master pages, accessing master page controls from a content page. Navigation: Introduction to use the site		25

	<p>navigation, using site navigation controls.</p> <p>Databases: Introduction, using SQL data sources, GridView Control, DetailsView and FormView Controls, ListView and DataPager controls, Using object datasources.</p>		
October	<p>ASP.NET Security: Authentication, Authorization, Impersonation, ASP.NET provider model</p> <p>LINQ: Operators, implementations, LINQ to objects,XML,ADO.NET, Query Syntax.</p> <p>ASP.NET Ajax: Introducing AJAX, Working of AJAX, Using ASP.NET AJAX server controls.</p> <p>JQuery: Introduction to JQuery, JQuery UI Library, Working of JQuery</p>		20

Sign of Faculty

Sign of Coordinator

M.L.Dahanukar College of Commerce

Teaching Plan: 2017 - 18

Department: I.T.

Class:T.Y.B.Sc.(I.T.)

Semester:V

Subject:SOFTWARE TESTING

Name of the Faculty: SUPRITHA BHANDARY

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Fundamentals of testing: Necessity of testing , what is it, Testing principles, Fundamental test process, The psychology of testing Testing throughout the software life cycle: Software development models Test levels, Test types: the targets of testing, Maintenance testing		18
July	Static techniques: Reviews and the test process, Review process, Static analysis by tools process, static analysis by tools		10
August	Test design techniques: Identifying test conditions and designing test cases , Categories of test design techniques, Specification-based or black-box techniques, Structure-based or white-box techniques, Experience-based techniques Tool support for testing: Types of test tool, tool support for management of testing		15
September	Requirements management tools, Incident management tools, configuration management tools, tool support for static testing	Class test	09
October	modelling tools, test harness tools, Potential benefits and risks, performance testing tools, pilot project		08

Sign of Faculty

Sign of Coordinator

M.L.Dahanukar College of Commerce

Teaching Plan: 2017-18

Department: Information Technology

Semester:V

Class:T.Y.B.Sc.(I.T.)

Subject: Advanced Java

Name of the Faculty: Rashmi Vane

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Unit 1 – Event Handling <ol style="list-style-type: none">1. Applet Basics2. Delegation Event Model3. Events, Event classes4. Event Listener Interfaces5. Using the Delegation Event Model6. Adapter classes7. Inner classes Unit 1 – AWT <ol style="list-style-type: none">1. Windows fundamentals2. Working with frame windows3. Control fundamentals - Labels, Buttons, CheckBox4. Control fundamentals - RadioButton, TextField5. Understanding Layout Manager	Class Test	Unit 1 – 14
July	Unit 2 – Swing Controls Unit 3 – Introduction to Servlets Unit 3 – Servlet API and Lifecycle	Class Test	Unit 2 - 16 Unit 3- 4
August	Unit 3 – Working with Servlets Unit 4 – JDBC <ol style="list-style-type: none">1. Design of JDBC2. JDBC Drivers	Class Test	Unit 3 – 8 Unit 4- 10

	<ol style="list-style-type: none"> 3. JDBC architecture 4. Scrollable and updatable resultsets 5. Row sets 6. Metadata 7. Transaction <p>Unit 4 – JSP</p> <ol style="list-style-type: none"> 1. Introduction&Disadvantages 2. JSP v/s Servlets 3. Lifecycle of JSP 4. Comments 5. JSP documents& JSP elements 6. Action elements 		
September	<ol style="list-style-type: none"> 7. Implicit objects 8. Scope 9. Character quoting conventions 10. Unified Expression Language. <p>Unit 5- Java server Faces</p> <ol style="list-style-type: none"> 1. Need of MVC 2. What is JSF? 3. Components of JSF 4. JSFlifecycle, 5. JSF configuration 6. JSF web applications (login form, JSF pages) <p>Unit 5– EJB</p> <ol style="list-style-type: none"> 1. Enterprise bean architecture 2. Benefits of enterprise bean 3. Types of beans 4. Accessing & packaging beans 5. Creating web applications using enterprisebeans, building and running web application. 	Class Test	Unit 4 – 4 Unit 5–10
October	<p>Unit 6– Hibernate</p> <ol style="list-style-type: none"> 1. Introduction 2. Writing the application, application developmentapproach 3. Creating database and tables in MySQL, creating a web application,Adding the required library files, creating a java bean class 4. Creating hibernateconfiguration 	Practical Exam	Unit 6–10

	and mapping file, adding a mapping resource.		
	Unit 6– Struts <ol style="list-style-type: none">1. Introduction2. Struts framework core components3. Installing and settingup struts, getting started with struts.		

Sign of Faculty

Sign of Coordinator

M.L.Dhanukar College of Commerce
Teaching Plan: 2017 - 18

Department: **Information Technology**

Semester: V

Class: **T.Y.B.Sc.I.T.**

Subject: **Linux Administration**

Name of the Faculty: **Archana Talekar**

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Unit I <ul style="list-style-type: none"> • Introduction • Duties of System Administrator • Booting and Shutting Down • File System • Disk Management 		20
July	Unit VI <ul style="list-style-type: none"> • System Administration • Administering Users and Groups Installing • Upgrading Software Packages Unit II <ul style="list-style-type: none"> • System Configuration Files • TCP/IP Networking • Network File System 		20
August	Unit III <ul style="list-style-type: none"> • Connecting to Microsoft Networks Unit IV <ul style="list-style-type: none"> • Internet Services • Domain Name System Unit V <ul style="list-style-type: none"> • Configuring FTP Services Unit VI <ul style="list-style-type: none"> • Configuring Web Server 	Class Test	24
September	Unit V <ul style="list-style-type: none"> • Configuring Mail Server Unit III <ul style="list-style-type: none"> • Additional Network Services 		06

Sign of Faculty

Sign of Coordinator

