

## UNIT- III

# 3

## Java Servlets and XML

### Syllabus

**Servlet** : Servlet architecture overview, A "Hello World" servlet, Servlets generating dynamic content, Servlet life cycle, parameter data, sessions, cookies, URL rewriting, other Servlet capabilities, data storage, Servlets concurrency, databases (MySQL) and Java Servlets.

**XML** : XML documents and vocabularies, XML declaration, XML Namespaces, DOM based XML processing, transforming XML documents, DTD : Schema, elements, attributes.

**AJAX** : Introduction, Working of AJAX.

### Contents

3.1	Introduction to Server Side Programming	
3.2	Servlet Architecture Overview	
3.3	A "Hello World" Servlet.....	May-19, ..... Marks 5
3.4	Servlets Generating Dynamic Content	
3.5	Servlet Life Cycle .....	March-20, ..... Marks 5
3.6	Servlet API	
3.7	Parameter Data	
3.8	Sessions	
3.9	Cookies .....	Dec.-19, ..... Marks 5
3.10	URL Rewriting	
3.11	Other Servlet Capabilities	
3.12	Data Storage	
3.13	Servlets and Concurrency	
3.14	Databases (MySQL) and Java Servlets	
3.15	XML Documents and Vocabularies .....	Dec.-18, 19, May-19, ..... Marks 5
3.16	XML Declaration	

3.17	Rules		
3.18	XML Namespaces		
3.19	Document Type Definition (DTD)	May-18,	Marks 5
3.20	Schema	May-18,	Marks 5
3.21	DOM based XML Processing		
3.22	Transforming XML Documents	May-19, March-20,	Marks 5
3.23	Introduction		
3.24	Working of AJAX		
3.25	XMLHttpRequest Object		
3.26	Coding AJAX Script	Dec.-18, 19, May-18,19	Marks 8
3.27	Multiple Choice Questions		

# 4

## JSP and Web Services

### Syllabus

**JSP** : Introduction to Java Server Pages, JSP and Servlets, running JSP applications, Basic JSP, JavaBeans classes and JSP, Support for the Model-View-Controller paradigm, JSP related technologies. **Web Services** : Web Service concepts, Writing a Java Web Service, Writing a Java web service client, Describing Web Services : WSDL, Communicating Object data: SOAP. **Struts** : Overview, architecture, configuration, actions, interceptors, result types, validations, localization, exception handling, annotations.

### Contents

4.1 Introduction to Java Server Pages	April-18, .....	Marks 5
4.2 JSP and Servlets	April-18, May-18, 19, .....	Marks 5
4.3 Basics of JSP	Dec.-18, 19, .....	Marks 5
4.4 Implicit Objects	May-18, 19, Dec.-18, .....	Marks 5
4.5 JavaBeans Classes and JSP	May-18, .....	Marks 5
4.6 Support for the Model-View-Controller Paradigm	Dec.-18, .....	Marks 6
4.7 Web Services Concepts	May-18, 19, Dec.-18, .....	Marks 8
4.8 Writing a Java Web Service		
4.9 Describing Web Services : WSDL		
4.10 Communicating Object Data : SOAP	Dec.-18, .....	Marks 4
4.11 Overview	May-18, 19, .....	Marks 6
4.12 Architecture		
4.13 Execution of First Struts Applications	Dec.-18, 19, .....	Marks 6
4.14 Configuration	Dec.-18, May-19, .....	Marks 6
4.15 Actions		

4.16 Interceptors

..... **May-18,** .....

4.17 Result Types

4.18 Validations

4.19 Localization

4.20 Exception Handling

4.21 Annotations

4.22 Multiple Choice Questions



**5****Server Side Scripting Languages****Syllabus**

**PHP:** Introduction to PHP, uses of PHP, general syntactic characteristics, Primitives, operations and expressions, output, control statements, arrays, functions, pattern matching, form handling, files, cookies, session tracking, using MySQL with PHP, WAP and WML. **Introduction to ASP.NET :** Overview of the .NET Framework, Overview of C#, Introduction to ASP.NET, ASP.NET Controls, Web Services. Overview of Node JS.

**Contents**

5.1	Introduction to PHP	
5.2	General Syntactic Characteristics	May-18,19, ..... Marks 4
5.3	Primitives	
5.4	Type Conversion	
5.5	Operations and Expressions	
5.6	Output	
5.7	Statements Control	May-18,19, Dec.-18, ..... Marks 6
5.8	Arrays	
5.9	Functions	
5.10	Built in Functions	
5.11	Form Handling	
5.12	Pattern Matching	Dec.-18, ..... Marks 6
5.13	Files	
5.14	Cookies	Dec.-19, ..... Marks 8
5.15	Session Tracking	May-18, Dec.-19, ..... Marks 8
5.16	Using MySQL with PHP	

5.17 WAP

5.18 WML

5.19 Introduction to ASP.NET

5.20 Overview of the .NET Framework

5.21 Overview of C#

5.22 Introduction to ASP.NET

5.23 ASP.NET Web Form Model

5.24 ASP.NET Controls

5.25 Web Services

5.26 Overview of Node JS ..... **May-18,** ..... Marks 4

5.27 Multiple Choice Questions

# 6

## Ruby and Rails

### Syllabus

**Introduction to Ruby :** Origins & uses of Ruby, scalar types and their operations, simple input and output, control statements, fundamentals of arrays, hashes, methods, classes, code blocks and iterators, pattern matching. **Introduction to Rails :** Overview of Rails, Document Requests, Processing Forms, Rails Applications and Databases, Layouts, Rails with Ajax. Introduction to EJB.

### Contents

- 6.1 Origins & Uses of Ruby
  - 6.2 Scalar Types and their Operations
  - 6.3 Simple Input and Output
  - 6.4 Control Statements
  - 6.5 Fundamentals of Arrays
  - 6.6 Hashes
  - 6.7 Methods
  - 6.8 Classes
  - 6.9 Code Blocks and Iterators
  - 6.10 Pattern Matching
  - 6.11 Overview of Rails
  - 6.12 Document Requests
  - 6.13 Processing Forms
  - 6.14 Rails Applications and Databases
  - 6.15 Layouts
  - 6.16 Rails with Ajax
  - 6.17 Introduction to EJB
  - 6.18 Multiple Choice Questions
- ..... May-18, 19, Dec.-19, ..... Marks 8