

S.Y.B. Sc CS–Sem –IV

Subject –Advance Java

Unit 1

- a. Difference between AWT and Swing.
- b. Explain the JFrame Class.
- c. Write short note on JDialog?
- d. Write short note on JApplet.
- e. Explain sets of panes?
- f. Explain JLabel and JTextFielded.
- g. Explain how to create JTextFielded and JPassword .
- h. Explain the JButton class in details.
- i. Describe various constructors and methods of JCheckbox class.
- j. Write a program to create a login form using swing . On click of OK Button check the username and pass word in correct or not and report with proper message.
- k. Explain how to use ButtonGroup class.
- l. Write a swing program to accept temperature of the day in a textfield. Using radio buttons.
- m. Write a swing program to accept temperature of the day in a textfield. Using radio buttons choose conversion : Fahrenheit to Celsius or vice versa . on click of button , display the converted temperature in label. [Formula:C=(f-32)*5/9].
- n. Differentiate between JList and ComboBox.
- o. Write a swing program to create a combo box and a label. The combo box contains list of states of India . when a stae is selected , its capital is displayed in a label.
- p. Explain how to use ButtonGroup class.
- q. What is a combobox ? explain various constructors and methods of JcomboBox class.
- r. Write a program in java which create a list containing at least # theatres name. on click of any theartre, the movie name from theatre should be displayed in a TextField.
- s. Explain in details JTree.
- t. Explain in details about Jmenu
- u. Explain in details JTable class
- v. Write about Progressbar class in Swing.
- w. Explain in details about JScrollbar in swing

JDBC

- x. Explain JDBC Architecture.
- y. Write a short note on DriverManager class
- z. Explain various methods of connection interface.
- aa. Write a JDBC program to accepts a dept_id from user and displays total number of records in it. (table : employee(Eid, dept_id, Ename, Address, Salary)
- bb. Write steps for Jdbc connectivity.
- cc. Write a JDBC program to accept employee id form the user, find the employee in the table and display employee's name.(Assume employee table exits with fields : emid, name ,salary)
- dd. Explain jdbc drivers and types JDBC driver.
- ee. Explain Statement interface and its methds.

- ff. Explain various ways of creating ResultSet in JDBC.
- gg. Write java program to insert one record of information into the database table named (deptable0, by accepting the details from the user; using PreparedStatement.
Depttable(deptno int primary key, detnmae varchar(10) , deptloc varchar(10)).
- hh. What is prepared statement ? How to create and use it in JDBC.
- ii. Write a JDBC program to create an Employee table . Insert two record in the table using preparedStatement.
- jj. Explain the following methods i. setautoCommit() ii rollback()

Unit 2

- a. Explain types of system architectures with neat diagram ?
- b. Explain HTTP protocol and HTTP methods.
- c. Explain web server and web container ?
- d. Write a Servlet Program to display the name of the servlet and its initialization parameters with its respective values.
- e. Write a servlet program to display the name of the servlet and its initialization parameters with its respective values.
- f. Write a servlet program to accept name and age of a person from index.html and determine if the person is eligible to vote or not.
- g. Explain various methods used for reading form data in a servlet.
- h. Write a servlet program to accept name and aggregate marks from index.html. if the aggregate marks is larger than 55, then print "you are selected", else print "you are not selected".
- i. Differentiate between GenericServlet and HttpServlet.
- j. Explain servlet life cycle in detail.
- k. Write a note on ServletContext interface.
- l. Explain session tracking mechanism in servlets.
- m. Write a servlet program to display the name of the servlet and its initialization parameters with its respective values.
- n. What is purpose of HttpSession interface ? Explain various methods of this interface.
- o. Write a servlet program to accept name and age of a person from index.html and determine if the person is eligible to vote or not.
- p. Create a servlet for login page . if the username and password are correct then it says message "hello" else a message "login failed".

JSP.

- q. State and explain advantages of JSP.
- r. Explain how jsp files are executed by web server?
- s. Explain Life Cycle of a JSP page ?
- t. Explain the following implicit JSP object:
 1. Request
 2. PageContext
- u. Explain the following implicit JSP object:
 1. Response
 2. Exception

- v. Explain the following implicit JSP objects:
 - 1. Response
 - 2. Page
- w. Write a note on JSP application implicit object.
- x. State and explain scopes of JSP object.
- y. Explain page directive in JSP.
- z. Explain the Directive in JSP.
- aa. Explain how to use include directive in JSP.
- bb. Explain the following : i. Expressions tag ii. Declaration tag.
- cc. Explain <jsp:setProperty> and <jsp:getProperty> action tags.
- dd. Write a JSP program to accept studentname and its stream (eg science or commerce)from index.html if the stream == science display message "welcome to take admission for bscit and bsccs" else display welcome to take admission for bcom and bms.
- ee. Write a jsp code to accept a number from the user and display "hello world" message for those number of times.

Unit 3.

- a. What is Java Beans? Enlist its advantages & disadvantages?
- b. Explain the getter and setter method of java bean class.
- c. Explain <jsp:setProperty> and <jsp:getProperty> action tags.
- d. Write a simple Java Bean code to access employee id & name.
- e. Illustrate with example ,how to create and use a java Bean.
- f. Write a note on MVC Architecture.
- g. Write the features of struts 2 framework.
- h. Explain struts 2 MVC pattern.
- i. Explain request lifecycle of struts 2.
- j. Create strut 2 application to display "hello world" with user name.
- k. Explain the significance of struts.xml file in struts 2 application.
- l. Explain the role of Action class in Struts 2 ?
- m. Write a note on strut 2 Action.
- n. Explain the role of interceptor in strut.
- o. Write a note on strut 2 Interceptor.
- p. Explain various Result Type available in struts 2.
- q. Write a short note on OGNL.
- r. What is JSON ? Enlist characteristics and uses of JSON.
- s. List and Explain valid JSON data types.
- t. Explain JSON Object. Give Example and illustrate.
- u. Give Example and illustrate how to use JSON Schema.
- v. What is JSON schema ? give example and illustrate.
- w. Discuss difference between Joson and XML
- x. Copare and contras JSON and XML.

