**Reg. No. \_\_\_\_\_\_\_\_**

**Karunya University**

**(Karunya Institute of Technology and Sciences)**

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May-2013**

**Subject Title: PROGRAMMING IN JAVAEE Time: 3 hours**

**Subject Code: 11CA310 Maximum Marks: 100**

**Answer ALL questions (5 x 20 = 100 Marks)**

1. **Compulsory:**

a. Explain about the Multi-Tier Architecture. (6)

b. List out the advantages of J2EE. (6)

c What is Session Management in J2EE? (8)

2. a. With a neat sketch, describe the Anatomy of a Java Servlet. (7)

b. What is meant by Cookies? (7)

c. Define Tracking Session. (6)

(OR)

3. a. Explain with an example about the JSP Tag. (14)

b. Discuss about Session Objects. (6)

4. Write a short note on:

a. Database Connection. (8)

b. Metadata. (6)

c. Data types. (6)

(OR)

5. a. Discuss in detail about Calculating data. (12)

b. Differentiate between Ordering and Grouping data. (8)

6. Explain:

a. Session java bean . (8)

b. Entity java bean. (12)

(OR)

7. a. Write a note on Send Email message. (5)

b. Discuss about Forwarding an Email message. (10)

c. Explain about Receiving attachments. (5)

8. a. Explain the Server side in remote method invocation. (7)

b. What is JVM security? (4)

c. Describe Web services security. (9)

(OR)

9. a. What are the Components of a Java Message Service (JMS) program? (12)

b. Explain the various Messages of Java Message Service (JMS). (8)