



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.C.A.DEGREE EXAMINATION – COMPUTER APPLICATIONS**

**FOURTHSEMESTER – APRIL 2018**

**16PCA4ES03- ADVANCED JAVA PROGRAMMING**

Date: 30-04-2018  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART-A**

**Answer ALL Questions:**

**10\*2=20**

1. What are the types of application servers?
2. Mention the steps to implement JDBC.
3. Draw the directory structure of an application.
4. What are the events that may occur during the life cycle of servlet?
5. Mention the different phases of JSF request processing life cycle.
6. State the use of resource bundles.
7. What is EJB? Mention the features of EJB.
8. What are the types of timers?
9. Mention the Features of entity classes in persistent API.
10. What are the entity relationship types? Give example

**PART-B**

**Answer ALL Questions:**

**5\*8=40**

11.a.) Illustrate with diagram the steps involved in using the prepared statement object

(or)

b.) Explain the java EE application architecture.

12.a.) Write short notes on the techniques for servlet collaboration.

(or)

b.) What are wrappers? Explore the types of wrapper classes.

13.a.) Illustrate the MVC architecture of JSF.

(or)

b.) Explain the JSF core tag libraries.

14.a.) What is distributed transaction? Explain the protocols and interactions in distributed transaction.

(or)

b.) Explain the annotations used in the .lifecycle callback methods in an interceptor class.

15.a.) Describe in detail the life cycle of entity.

(or)

b.) Explain JPQL query conditional expressions with example.

## PART-C

**Answer any TWO Questions:**

**2\*20=40**

- 16.a.) Explore the JDBC drivers architecture.
- b.) Illustrate any two session tracking mechanism.
- 17.a.) Discuss the various components provided for all UI components.
- b.) Explain the life cycle of the following
    - i. stateless session bean
    - ii. stateful session bean.
- 18.a.) Discuss the steps to execute the queries.
- b.) Illustrate the JPQL statements with example.