LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FOURTHSEMESTER – APRIL 2018

16PCA4MC03- OPEN SOURCE WEB TECHNOLOGIES

Date: 23-04-2018   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

PART-A

Answer ALL Questions: 10*2=20

1. Mention the features of java EE platform
2. What are the types of JAVA EE containers?
3. Define servlet. What are its features?
4. What are the types of wrapper class?
5. What is JSF? List its elements.
6. List the standard JSF converters.
7. What is session bean? List its types..
8. Define activation and passivation.
9. Differentiate session bean and entity bean.
10. What is JPQL? List the operators used in JPQL.

PART-B

Answer ALL Questions: 5*8=40

11.a.) Explain the web architecture models.   .

(or)

   b.) Illustrate the basic steps to implement JDBC in java application.

12.a.) Write short notes on servlet life cycle.

(or)

   b.) Explain any two session tracking mechanism.

13.a.) Illustrate the JSF HTML tags.

(or)

   b.) Explain the methods of applying JSF validations .

14.a.) Discuss life cycle of Stateful Session Beans.

(or)

   b.) Write short notes on

                   i. characteristics of MDB

                   ii. life cycle of MDB

15.a.) Illustrate the types of entity relationship.

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   b.) Write short notes on the annotations used in an entity class.

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PART-C

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Answer any TWO Questions: **2*20=40**

16.a.) Explain the types of enterprise architecture.

   b.) Explain in detail the servlet collaboration implementation.

17.a.) Discuss in detail the JSF request processing life cycle.

   b.) Illustrate the various transaction models.

18.   Explain the following in detail

                i. JPQL functions with example. (10 marks)

                ii. steps to execute query.(10 marks)

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