KUMARAGURU
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MCA DEGREE EXAMINATIONS: NOV/DEC 2014

(Regulation 2009)

Fourth Semester

MASTER OF COMPUTER APPLICATIONS

MCA517: Middle -Ware Technologies

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. List out the functions of the middleware?

2. What are the most typical functional units of client/server applications?

3. Can the client directly access the bean? Justify?

4. What is the difference between Java beans and enterprise Java beans?

5. What is JNDI?

6. Draw the life cycle of stateless session bean.

7. What is the purpose of Common Language Infrastructure?

8. List the importance of .NET base class libraries?

9. What is marshalling and unmarshalling?

10. How does the CORBA provides language independence and platform independence?

PART B (5 x 16 = 80 Marks)

11. a) (i)   Illustrate briefly about the Object Server and Group Server?   (8)

        (ii) Explain in detail about the service specific middleware.   (8)

                                    (OR)

    b) (i)   Compare RPC and MOM.   (8)

        (ii) Discuss briefly about the basic components of Client/Server building blocks.   (8)

12. a) (i)   Discuss about EJB Home interface and EJB Remote Interface.   (8)

        (ii) Discuss how do clients converse with EJBs.   (8)

                                    (OR)

b)   (i)   How does EJB container provide support for transactions and persistence?   (8)

    (ii)   Describe briefly about the EJB roles and responsibilities   (8)

13.   a)   (i)   Explain the Entity bean life cycle with suitable diagram.   (8)

      (ii)   What makes Entity Beans different from Session Beans? Explain briefly.   (8)

(OR)

  b)   (i)   Write a program for banking operations using entity bean.   (8)

    (ii)   What is deployment descriptor? What are their uses? How are they   (8)
implemented?

14.   a)   (i)   What is called .NET Remoting? Discuss in detail.   (8)

      (ii)   Highlight the features of .NET framework   (8)

(OR)

  b)   (i)   Explain the architecture of .Net framework with diagram?   (8)

    (ii)   Write notes on Common Language Runtime.   (8)

15.   a)   (i)   What is called COM? How does COM support the different types of servers for   (8)
implementing components?

      (ii)   Describe the architecture of CORBA with neat diagram.   (8)

(OR)

  b)   (i)   What is called IDL? Explain briefly with suitable example.   (8)

    (ii)   Highlight the differences between COM and CORBA   (8)

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