



**MCA DEGREE EXAMINATIONS: MAY 2015**

(Regulation 2013)

Third Semester

**COMPUTER APPLICATIONS**

P13CAT302: Middleware Technologies

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 2 = 20 Marks)**

1. Compare remote procedure call and message oriented middleware.
2. Define transaction server.
3. Give the functionality of `ejbActivate()` and `ejbStore()` method.
4. Mention any four exceptions raised in EJB.
5. What are the services that the EJB container provides to EJB?
6. List out the various transaction attributes in EJB.
7. Write the features of .NET architecture.
8. List the roles of .NET base class libraries.
9. Differentiate between marshalling and unmarshalling.
10. Give the use of proxy and stub in interprocess communication.

**Answer any FIVE Questions:-**

**PART B (5 x 16 = 80 Marks)**

**Q.No:11 is Compulsory**

11. Write the benefits provided by EJB for application developers. With a neat sketch explain the EJB architecture in detail.
12. (i) Explain the life cycle of entity bean in detail. (8)  
(ii) Draw the life cycle of stateful session bean and explain. (8)

13. (i) How does CLR execute the .NET source code? Explain the steps involved in it. (8)
- (ii) Discuss the basic steps to create the web services in .NET platform. (8)
14. Describe the architecture of CORBA in detail.
15. List out and explain the different types of servers. How do they communicate with clients?
16. (i) Explain the object life cycle in COM. (12)
- (ii) Highlight differences in COM and CORBA. (4)

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