

MCA 752

M.C.A. DEGREE EXAMINATION, NOVEMBER 2009.

Fifth Semester

Computer Applications

MIDDLEWARE TECHNOLOGY

(From 2006-2007 Batches)

Time : Three hours

Maximum : 75 marks

Answer any FIVE questions, choosing ONE full question from each unit.

All questions carry equal marks.

UNIT I

1. (a) Explain the architecture of MOM. How is it different from other types of middleware? (10)
- (b) Compare 2-tier client-server architecture with 3-tier architecture. Also highlight when 3-tier architecture is better than 2-tier architecture. (5)

Or

2. (a) Write notes on peer to peer communication. (10)
- (b) Develop a simple e-commerce web database model which uses a middleware. (5)

UNIT II

3. Draw the EJB architecture and explain the functions of various entities involved. (15)

Or

4. (a) How does an EJB container provide support for transactions and persistence? (10)

(b) Write the steps to deploy a new EJB module. (5)

UNIT III

5. (a) Explain the concept of session bean and its types in detail. (8)

(b) Describe the components of entity bean. What makes entity beans different from session beans? Explain. (7)

Or

6. Consider and E-Commerce applications of "Shooping cart" for purchasing things over the web. Implement the above applications using EJB by considering the necessary issues involved. (15)

UNIT IV

7. (a) Explain the architecture of CORBA in detail. (8)

(b) Write a CORBA IDL specification, stack class, server main program and client main program for the given description. 'The clientsend the server an integer value to be stored in a stack'. (7)

Or

8. (a) Enlist the services offered by CORBA and explain its usage. (8)

(b) How does CORBA provide support for network heterogeneity? (7)

UNIT V

9. (a) Describe the object lifecycle in COM. (8)

(b) Highlight the differences in COM and CORBA. (7)

Or

10. (a) How does Proxy and Stub are generated in remote communication? Describe in detail how communication takes place with diagram. (8)

(b) Draw the architecture of .NET and how does CLR execute the .NET source code? Explain the steps involved in it. (7)