



Code No. : 3165

FACULTY OF INFORMATICS
B.E. 4/4 (IT) I Semester (Main) Examination, November/December 2010
MIDDLEWARE TECHNOLOGIES

Time : 3 Hours]

[Max. Marks : 75

Note : Answer all Questions from Part – A, answer any five Questions from Part – B.

PART – A

(25 Marks)

1. What is a web server ? 2
2. How do you retrieve client data using servlet ? 3
3. What are the basic components of struts framework ? 3
4. What is dependency injection in EJB 3 ? 2
5. List the main differences between EJB 2.1 and EJB 3. 2
6. What is the difference between stateful session bean and stateless session bean ? 3
7. What is CTS in .NET ? 3
8. Give an example for middleware services provided by application servers. 3
9. Write the driver class of Oracle database. 2
10. Compare COM and CORBA. 2



PART – B

(50 Marks)

11. Explain the following :

- a) SOA b) SOAP c) WSDL 10

12. Write code to authenticate a login page using servlet and database (any) : 10

display “login successful” if authentication is successful

display “login failed” and redisplay login page if authentication fails.

13. Explain the CORBA architecture and list the responsibilities of ORB. 10

14. a) Explain flow of control of a struts application with diagram. 6

b) Write a formbean class for registration form. 4

15. Explain .NET architecture in detail. 10

16. Explain EJB 3 architecture in detail. 10

17. a) Explain life cycle of entity bean. 8

b) What is object relational mapping ? 2