

FACULTY OF INFORMATICS

M.C.A. III - Year I – Semester (Main & Backlog) Examination, January / February 2014

Subject: Middleware Technologies**Time: 3 hours****Max. Marks: 80****Note: Answer ONE question from each unit. All questions carry equal marks.****UNIT – I**

- 1 a) Explain the characteristics of client | server. 8
 b) Explain different types of servers. 8
- OR**
- 2 a) What is meant by middleware? Explain various middleware services. 8
 b) Explain the concept of SOAP. 8

UNIT – II

- 3 Explain the architecture of EJB in detail. 16
- OR**
- 4 Explain the concept of building and deploying EJB's. 16

UNIT – III

- 5 Explain the life cycle of EJB session bean. 16
- OR**
- 6 Write a program for banking operations using entity bean. 16

UNIT – IV

- 7 Define ORB. Explain the architecture of CORBA. 16
- OR**
- 8 Write a program to print "Helloworld" using CORBA. 16

UNIT - V

- 9 Explain the architecture of .NET frame work. 16
- OR**
- 10 a) Define interface pointer in COM. 8
 b) Differentiate between DCOM and CORBA. 8
