

**FACULTY OF INFORMATICS****B.E. 4/4 (IT) I - Semester (Supplementary) Examination, June / July 2015****Subject : 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)**

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|---|---|
| 1 Define the term client / server with its building block.  | 3 |
| 2 Write short notes on SOA.   | 3 |
| 3 What are the basic components of struts framework?  | 3 |
| 4 What are the servlet life cycle methods?  | 3 |
| 5 List the services of EJB container.   | 2 |
| 6 What are the different state management techniques in servlets and write the context in which each technique is used? | 3 |
| 7 Why are language mapping a necessary part of CORBA.   | 2 |
| 8 What is the difference between Stub and skeleton?   | 2 |
| 9 What are different activation modes in remoting?  | 2 |
| 10 List the COM data types.   | 2 |

**PART – B (50 Marks)**

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|---|----|
| 11 Explain the messaging and queuing middleware.                        | 10 |
| 12 Explain different session tracking techniques with examples.         | 10 |
| 13 Explain the CORBA architecture and list the responsibilities of ORB. | 10 |
| 14 Describe the struts framework in detail.                             | 10 |
| 15 a) Compare and contrast COM and CORBA.                               | 5  |
| b) Explain the architecture of .NET framework.                          | 5  |
| 16 Explain EJB3 architecture in detail.                                 | 10 |
| 17 Write short notes on the following :                                 |    |
| a) Proxy and stub   | 5  |
| b) Explain difference between JSP and Servlet.                          | 5  |

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