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| CA9144 | MIDDLEWARE TECHNOLOGIES | L T P C |
| | | 3 0 0 3 |
| UNIT I | INTRODUCTION | 7 |
| Emergence of Middleware – Objects, Web Services – Middleware Elements – Vendor Architecture – Interoperability – Middleware in Distributed Applications – Types of Middleware – Transaction-Oriented Middleware – MOM – RPC. | | |
| UNIT II | OBJECT ORIENTED MIDDLEWARE | 12 |
| OOM – Developing with OOM – Heterogeneity – Dynamic Object Request – Java RMI – COM+. | | |
| UNIT III | COMPONENT OBJECT RESOURCE BROKER ARCHITECTURE (CORBA) | 12 |
| Naming – Trading – Life Cycle – Persistence – Security – CORBA. | | |
| UNIT IV | WEB SERVICES | 7 |
| Introduction – XML Web Services standards – Creating Web Services – Extending Web Services – Messaging Protocol – Describing – Discovering – Securing. | | |
| UNIT V | OTHER TYPES OF MIDDLEWARE | 7 |
| Real-time Middleware – RT CORBA – Multimedia Middleware – Reflective Middleware – Agent-Based Middleware – RFID Middleware. | | |
| | | TOTAL = 45 |

TEXT BOOKS

1. Chris Britton and Peter Eye, "IT Architecture and Middleware", Pearson Education, 2nd Edition, 2004.
2. Wolfgang Emmerich, "Engineering Distributed Objects", John Wiley, 2000.
3. Keith Ballinger, ".NET Web Services – Architecture and Implementation", Pearson Education, 2003. (Unit IV)

REFERENCES

1. Qusay H. Mahmoud, "Middleware for Communications", John Wiley and Sons, 2004.
2. Gerald Brose, Andreas Vogel, Keith Duddy, "Java™ Programming with CORBATM: Advanced Techniques for Building Distributed Applications", Wiley, 3rd edition, January, 2004.
3. Michah Lerner, "Middleware Networks: Concept, Design and Deployment of Internet Infrastructure", Kluwer Academic Publishers, 2000.