VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
M.Tech. I Year (CSE) II-Semester (Main) Examinations, July-2016
Distributed Computing

Time: **3** hours

Max. Marks: **70**

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

1. Distinguish between uniprocessor and multiprocessor operating systems.
2. Define middleware. Give its significance for modern distributed systems.
3. How does the implicit and explicit binding works? Give example.
4. List the message passing primitives of MPI.
5. State the advantages of threads in distributed computing.
6. State iterative name resolution in DNS.
7. Compare COM and DCOM.
8. Specify the various services offered by GLOBE.
9. Mention the characteristics of multimedia data.
10. Why stream adaptation is used in distributed multimedia Systems?

Part-B (5 × 10=50 Marks)
(All bits carry equal marks)

11. a) What are the characteristics of distributed systems? Explain the goals and examples of distributed systems.

    b) Explain three tiered client server architecture.

12. a) Describe parameter passing mechanism in RPC.

    b) Discuss the implementation of an object reference that allows a client to bind to a transient remote object.

13. a) Explain the working of a multi threaded server in a dispatch/worker model.

    b) What is Domain Name System? How it works in distributed environment?

14. a) How messaging in CORBA is different from other systems? Explain it

    b) Explain the architecture of DCOM with neat diagram.

15. a) Discuss the QOS parameters used in distributed multimedia streams.

    b) What is scaling? Describe video scaling methods.

16. a) Compare network operating and distributed operating systems.

    b) Explain the message queuing model of distributed communication.

17. Write short notes on any **two** of the following:
    a) Software agents in distributed systems
    b) CORBA Naming service
    c) Resource management in distributed multimedia

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