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**ANNA UNIVERSITY CHENNAI**

**B.Tech degree Examinations , APR/MAY 2011**

**SIXTH SEMESTER**

(Regulations:2004)

**IT382 – Network Programming & Management**

**Time: 3Hrs**

**Max.Marks: 100**

**Answer all questions**

**PART A (10 x 2 = 20 Marks)**

1. What is the need for Binding the socket in the server?
2. Compare iterative and concurrent server.
3. Compare inet\_aton and inet\_addr address conversion functions.
4. What is the problem associated with the existence of Zombie States?
5. How IPv6 is supported in gethostbyname functions?
6. State the role of DNS. List down the contents of it.
7. Compare joinable thread with detached thread.
8. State the need for Raw sockets. Why is has to be handled with care?
9. Show the message format of SNMP GetRequest PDU.
10. State the significant difference between SNMPv1 and SNMPv2.

**PART B ( 5 x 16 = 80 Marks)**

11. a) Explain the network management architecture in detail.. (8)
- b) Write notes on Performance monitoring and account Management in a network. (4+4)
12. a) i) Explain the syntax of various TCP server side system calls. (8)
- ii). What is the need for address conversion functions? Mention the various socket address structures. (8)

Or

b) i. Write a program for server side to handle multiple clients by considering any one boundary conditions. (8)

ii. Write notes on Posix Signal handling functions. (8)

13. a) Explain gethostbyname, gethostbyname2, getservbyname and getservbyport functions with their syntax. (16)

Or

b) Write a Concurrent server program which uses TCP and show the status of Client and Server before call to fork, after fork and after socket closing by parent and child. (16)

14. a) Explain any four IP related Socket options in detail. (16)

Or

b) Explain the operations of getsockopt and setsockopt functions. Write a sample program using these functions to change the default values for TTL, TOS and sender buffer size. (16)

15. a) Write notes on

i. Raw Socket input and output. (8)

ii. IPV6 client communicating with IPV4 server (8)

Or

b) Write a program that uses raw sockets for identifying the intermediate routers. (16)