Roll No. _____   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(IT) (2011 onwards) (Sem.–6)
NETWORKING PROGRAMMING
Subject Code : BTIT-601
Paper ID : [A2351]

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :
1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. **Write briefly :**

   a) Name various shells of UNIX operating system. Which is most commonly used?

   b) Compare the terms message and system queues.

   c) Differentiate between TCP and UDP sockets.

   d) Name various services of TCP/IP model.

   e) What do you understand by RPC?

   f) Define the term NetBIOS.

   g) Describe the term program and process in UNIX.

   h) What is the purpose of select and poll functions?

   i) What do you mean by SAP?

   j) Describe the authentication process in UNIX.

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SECTION-B

2. Discuss the features of UNIX environment which makes it suitable for network programming.

3. Differentiate between IPv4 and IPv6.

4. Describe the Unix Kernel support for a process and show various related data structures.

5. What are semaphores and their role in IPC?

6. What is job control? Discuss the job control features with the help of a block diagram.

SECTION-C

7. What is Socket? How it is created? Discuss various functions used for transmitting and receiving data over sockets.

8. a) What is signal and signal handler? Discuss various POSIX defined signals.

   b) What are pipes and Queues? How these are used in Inter process communication?

9. Write short notes on the following :

   a) TLI

   b) SNA