

**Total No. of Pages : 02**

**B.Tech.(CSE/IT) (2011 Onwards) (Sem.-5)**

**Subject Code : BTCS-501**

Paper ID : [A2097]

**Max. Marks : 60**

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.

1. Write briefly :

1. What is an adhoc Network?
2. What is the use of BTS in a cellular network architecture?
3. What is the difference between a handoff and a handover?
4. What does IS-95B standard used for?
5. What does LMDS standard stand for?
6. What is the main difference between CDMA and TDMA?
7. Which applications can use VSAT based connections?
8. What is the difference between a packet and a frame?
9. How many bits are used by an IPv6 and IPv4 address?
10. What is the usual range of Ethernet in a network?

**SECTION-B**

2. What are the different types of errors in a network? How are they detected?
3. Explain any two mechanisms for error detection used in data link layer.
4. What are the different types of channel assignment? Discuss the pros and cons of each.
5. What is the role of a Visitor Register and Home Register in Cellular Network?
6. What are the applications of IPsec protocol?

**SECTION-C**

7. Explain the handoff strategies. What are the major problems addressed by these techniques?
8. What are the features and applications of adhoc network? State atleast 02 applications of adhoc networks from your daily life.
9. Write short notes on :
  - a. Improving capacity in cellular systems
  - b. Bluetooth Technology
  - c. Difference between 2G and 3G