



- Notes :
1. Answer **Three** questions from Section A and **Three** questions from Section B.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data whenever necessary.
 4. Illustrate your answers whenever necessary with the help of neat sketches.

SECTION - A

1. a) Explain cellular system in detail. **6**
b) Briefly explain why security mechanism are becoming increasingly important in wireless system. **7**
2. a) Describe the function of GSM system elements. **6**
b) Discuss SDMA, TDMA, FDMA & CDMA with respect to following approaches. **7**
 - a) Idea
 - b) Terminals
 - c) Signal separation
 - d) Advantages
 - e) Disadvantages
3. a) Explain GSM system architecture. **7**
b) Explain hidden & exposed terminal problem in mobile computing. Describe the solution. **6**
4. a) Discuss in details the various satellite orbit used in mobile computing. **7**
b) Explain advantage & disadvantage of wired LAN over wireless LAN. **6**
5. a) Explain how power management is done in IEEE 802.11 architecture. **7**
b) Write a short note on:
 - i) Pure aloha
 - ii) Slotted aloha

SECTION - B

6. a) Explain architecture of Bluetooth protocol stack. **6**
b) Explain various phases of HiperLAN1. **7**
7. a) Describe the significance of DHCP Protocol. **7**
b) Write detail note on mobile IP Protocol. **6**
8. a) Define Tunneling. Explain different mechanism of sending packets through tunnel. **7**
b) Explain mobile ad-hoc Network in detail. **6**
9. a) Explain architecture of cellular IP. **7**
b) Explain the various information security components. **6**
10. a) Explain wireless ATM with it's services and reference model. **7**
b) Write a short note on:
 - i) DHCP
 - ii) Dynamic Source Routing.
