

Note : Attempt any one question from each Unit. All questions carry equal marks.

Unit-I

- 1- (a) Give a brief overview of the existing network infrastructure.
- (b) How does the radio propagation in a free space work ? Explain in detail.

Or

- 2.(a) Discuss SIMO and MIMO channels in detail.
- (b) Write an informative note on different radio propagation mechanisms.

Unit-II

3. (a) Discuss various wireless network topologies in brief, (b) What are different steps involved in generic hand off process ? Explain.

Or

4. (a) What do you mean by signal interference ratio ? How is it calculated ?
- (b) Discuss various power saving mechanisms needed for wireless communications.

Unit —III

5. (a) Compare SDMA, TDMA, FDMA, CDMA in terms of transmission technique, signal separation, advantages, disadvantage and applications.
- (b) How do SMS services operate in GSM ? Explain in detail.

Or

6. (a) Describe any two modulation methods from the following in detail :

(i) AM                      (ii) FSK                      (iii) PSK

- (b) Explain WAP programming architecture in detail.

Unit-IV

7. (a) How WLAN industry has evolved gradually over the time ? What are the factors which played an important role in its evolution ? <http://www.rgpvonline.com/>
- (b) Draw a sketch and explain the basic architecture of a WATM.

Or

8. (a) Describe how the Wireless Home Networking has changed the lives of people in today's world.
- (b) Explain the Hyperlan-1 requirements and architecture with the help of a neat diagram.

Unit-V

9. (a) Describe the overall architecture of HomeRF system, (b) Discuss how 3G technology has revolutionized our lives in present scenario.

Or

10. (a) Explain the architecture of bluetooth networks. Discuss various applications of bluetooth networks,
- (b) What are the main aims of 802-15 WPAN group ? Elaborate.