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**Question Paper Code : 45861**

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Elective

Software Engineering

XCS 017 – WIRELESS TECHNOLOGY

(Common to 5 Year M.Sc. Information Technology and M.Sc. Computer Technology)

(Regulation 2003)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Wireless Media.
2. What is db?
3. What is CDMA?
4. Write any two cell sizes for dividing the cells into hierarchy.
5. What is the use of Mobile IP?
6. What is the purpose of DLL?
7. Define Soft Handoff.
8. What is meant by CDPD?
9. Mention any two types of PMD Transmission.
10. List out the two responsibilities of MAC layer.

PART B — (5 × 16 = 80 marks)

11. (a) Explain path loss models for Macrocellular Areas and Microcellular Areas with neat diagrams in detail.

Or

- (b) (i) Write a detailed on Frequency Hopping Spread Spectrum. (8)
- (ii) Elucidate Space Diversity Technique in detail. (8)

12. (a) (i) Compare and contrast CDMA, TDMA and FDMA in detail. (8)  
(ii) Explain in detail Data Integration in Voice Oriented Networks. (8)

Or

- (b) Write a detailed note on Architectural Methods for Capacity Expansion.
13. (a) (i) Explain how Identification schemes are used in Network Security with diagram. (8)  
(ii) Explain in detail Power Saving Mechanism in Wireless Networks. (8)

Or

- (b) Elucidate Reference Architecture of GSM in detail.
14. (a) Explain the mechanism of IMT 2000 in detail.

Or

- (b) Write a detailed on GPRS and Higher data rates.
15. (a) Elucidate Reference Architecture and Layer Protocol Architecture of IEEE 802.11 in detail.

Or

- (b) Explain in detail MAC Management Sub Layer with diagrams.