EIGHTH SEMESTER B.TECH. (ENGINEERING) 69 SCHEME DEGREE

IT 09 801—MOBILE COMMUNICATION SYSTE

Time: Three Hours

Part A

Answer all questions.

- State the characteristics of an antenna.
- 2. What is meant by a cordless system?
- 3. State the need for wireless LAN.
- 4. Define reverse tunneling.
- 5. What are the applications of Bluetooth technology?

 $(5 \times 2 = 10 \text{ marks})$

mam: 70 Marks

Part B

Answer any four questions.

- 6. What are the merits of signal encoding techniques?
- 7. Explain the significance of DECT.
- 8. State the advantages and disadvantages of Infrared LANs.
- 9. What are the major functions of Ad hoc networking?
- 10. Compare dynamic source routing and hierarchical routing.
- Define Frequency hopping.

 $(4 \times 5 = 20 \text{ marks})$

Part C

12. Explain the second generation TDMA frames structure and derive the efficiency of a TDMA system.

Or

- 13. Explain the concept of CDMA. What are its merits and demerits?
- 14. What is WLL? Explain in detail about WLL and Bluetooth.

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15. What are the functions of authentication and encryption used in GSM? Explain with suitable block diagram of GSM system.

16. Discuss in detail about services of 802.11 protocols with suitable block diagram.

Or

- 17. Explain the functions of Bluetooth technology with radio and baseband specifications.
- 18. What is meant by encapsulation? Explain in detail about Ad hoc networking.

Or

19. (i) List the difference between Indirect TCP and Snooping TCP.

(5 marks)

(ii) Write short notes on WAP protocol.

(5 marks)

 $[4 \times 10 = 40 \text{ marks}]$