

**G 1630**

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Reg. No.....

Name.....

**B.TECH. DEGREE EXAMINATION, MAY 2015**

**Eighth Semester**

EC 010 801—WIRELESS COMMUNICATION (EC)

(New Scheme—2010 Admission onwards)

[Regular/Supplementary]

Time : Three Hours

Maximum : 100 Marks

**Part A**

*Answer all questions.*

*Each question carries 3 marks.*

1. Briefly describe the types of channel assignment strategies.
2. Compare flat fading and frequency selective fading.
3. Give the features of SDMA.
4. Draw the frame structure of GSM.
5. Explain the features of CDMA.

(5 × 3 = 15 marks)

**Part B**

*Answer all questions.*

*Each question carries 5 marks.*

6. What is trunking and grade of service ?
7. What are the fading effects due to Doppler spread ?
8. Write short notes on FHMA.
9. Explain the various GSM handoff procedures.
10. Write the features of PDC and PHS.

(5 × 5 = 25 marks)

**Part C**

*Answer all questions.*

*Each question carries 12 marks.*

11. Briefly explain the various interference present in a cellular system.

*Or*

12. Describe cell splitting, cell sectoring and microcell zone concept.

**Turn over**

13. Draw the model of a two-ray ground reflection and explain.

*Or*

14. Derive the impulse response of a multipath channel.

15. With the aid of necessary diagrams, compare the features of FDMA and TDMA.

*Or*

16. Explain the various packet radio protocols.

17. Draw the architecture of GSM and explain.

*Or*

18. Briefly describe the various GSM channel types.

19. With the help of block diagram, explain forward CDMA channel modulation process.

*Or*

20. Explain reverse CDMA channel modulation process for a single user.

(5 × 12 = 60 marks)