

Roll No.

Total Pages : 03

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May 2024

B.Tech. (ENC) (Sixth Semester)

Mobile Communication (ECP-601)

Time : 3 Hours]

[Maximum Marks : 75

Note : It is compulsory to answer all the questions (1.5 marks each) of Part A in short. Answer any *four* questions from Part B in detail. Different sub-parts of a question are to be attempted adjacent to each other.

Part A

1. (a) What is blocked call delay system ? 1.5
- (b) Why we go for 3G ? 1.5
- (c) Compare Wi-Fi and Wi-max. 1.5
- (d) Define GOS. 1.5
- (e) What do you mean by AMPS ? Writes its standards. 1.5
- (f) What is IEEE 802.11 standard ? 1.5
- (g) What are the advantages of Digital techniques in cellular Systems ? 1.5

- (h) What is the significance of Frequency reuse concept in Cellular system ? 1.5
- (i) Compare Cellular telephony with cordless telephony. 1.5
- (j) Define Micro cell zone concept. 1.5

Part B

- 2. (a) Compare the different wireless communication system. 5
- (b) Explain in detail specification and working of GSM. 10
- 3. (a) Why do we need cell splitting and how can it be implemented ? 7.5
- (b) What do you mean by WLL and explain in detail its architecture. 7.5
- 4. (a) Write a note on co-channel interference and how does it affect the cellular system ? How to reduce CCI ? 7.5
- (b) Compare analog cellular system over digital cellular system. 7.5

- 5. (a) What do you mean by CDMA ? Compare its performance with TDMA. 7.5
- (b) What do you mean by space division multiple access technique ? Explain it with feature, application using appropriate figure. 7.5
- 6. a) Explain the architecture of ISDN. How is it different from other technologies ? 7.5
- (b) What do you mean intelligent cell ? Why it is needed and what are different methods to achieve intelligent system ? 7.5
- 7. (a) Explain the different hand off strategies used in wireless communication. 7.5
- (b) What are performance criteria of cellular system ? Explain in detail. 7.5