

Roll No.

24440

**B. Tech 7th Sem. (ECE)
Examination – May, 2018**

WIRELESS COMMUNICATION

Paper : ECE - 405 - F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Question No. 1 is *compulsory*. Attempt any *one* question from each section.

1. (i) What are the advantages of wireless communication system. Discuss with the help of examples. 5
- (ii) The shape of the cell is considered to be hexagonal. Why? 5
- (iii) What is packet ratio in multiple access technique for wireless communication? 5
- (iv) What are the applications of intelligent microcell system? 5

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SECTION – A

- 2. (a) Describe the differences between 2G, 2.5G, 3G. 10
- (b) Discuss the comparisons of various wireless communication system. 10
- 3. (a) Discuss the differences between paging system and cordless system 10
- (b) Explain WLAN and wireless local loop. 10

SECTION – B

- 4. (a) Draw and explain the block diagram of basic cellular system. 10
- (b) What is channel assignment strategies ? Make the difference between fixed and dynamic channel assignment strategies. 10
- 5. (a) How digital cellular system is advantageous over analog cellular system ? 10
- (b) Explain how coverage and capacity of cellular system can be improved ? 10

SECTION – C

- 6. (a) What is multiple access technique ? Explain TDMA in detail. 10
- (b) Describe capacity of cellular system in multiple access technique. 10

- 7. (a) Discuss spread spectrum multiple access technique. 10
- (b) What do you understand by space division multiple access ? 10

SECTION – D

- 8. (a) Explain the differences between wireless and fixed telephone network. 10
- (b) Discuss traffic routing in wireless networks. 10
- 9. Write short note on : 20
- (a) ISDN
- (b) Intelligent cell concept
- (c) In-building communication