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**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

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