

VII-044

Roll No. \_\_\_\_\_

Total Printed Pages : **2**

**07BEC103**

**B.TECH (ELECTRONIC & COMM. ENGG.)**

**VII SEM Examination, Dec.-2017**

**SUB : WIRELESS COMMUNICATION**

Time : 3 Hours]

[Total Marks 60

Use of following supporting material is permitted during examination.

1. \_\_\_\_\_ Nil \_\_\_\_\_ . \_\_\_\_\_ Nil \_\_\_\_\_

*Note: 1. Attempt any five questions .*

*2. Each question carry equal marks.*

- ① 1. ✓ Explain the properties of spreading codes. How they are generated briefly explain.
- ② 2 ✓ Describe the model of multipath faded radio signals.
3. Compare similarities and differences in the fundamental concepts of a direct sequence spread spectrum ( DS-SS) system versus a frequency hopping spread spectrum ( FH-SS) systems.

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3. 4/ What is small scale fading? Write the factors influencing fading.
5. Describe the CDMA systems and what are the advantages and disadvantages of using CDMA for a cellular network.
6. Explain the basic principle of operation of OFDM technique and write its advantages and disadvantages.
4. 7. Explain in details of building blocks of GSM architecture.
8. Write the advantages and disadvantages of wireless local area network. Briefly explain the IEEE802.11 standards.
9. Draw a neat diagram of telemetry, tracking, command and monitoring system for successful operation of a communication satellite and explain it.
10. List the main component of an earth station transmitter. With the assistance of a block diagram briefly explain its functions of operations.