

328733(28)

B. E. (Seventh Semester) Examination,

April-May 2020 / NOV-DEC 2020

(New Scheme)

(Et & T Engg. Branch)

WIRELESS COMMUNICATIONS

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all the questions. Part (a) is compulsory of each unit and carries 2 marks. Attempt any two from (b), (c) and carries 7 marks.

Unit-I

1. (a) Define wireless communication. 2
- (b) Describe the features of 2 G, 3 G and 4 G system in detail. 7

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- (c) Discuss evolution of Mobile radio communication. 7
- (d) Describe paging system with block diagram. 7

Unit-II

- 2. (a) Define the term frequency reuse. 2
- (b) Describe channel Assignment strategies in detail. 7
- (c) Describe micro cell zone concept with diagram. 7
- (d) Describe Handoff strategies with diagram. 7

Unit-III

- 3. (a) Give frequency bands of GSM. 2
- (b) Describe GSM Architecture in detail. 7
- (c) Describe GSM Channel in detail. 7
- (d) Describe GSM security in GSM. 7

Unit-III

- 4. (a) What is P-N sequence generator. 2
- (b) Describe MSK (minimum shift keying) Transmitter and receiver with diagram. 7

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- (c) Describe GMSK in detail. 7
- (d) What is spread spectrum. Describe DS-SS system? 7

Unit-V

- 5. (a) Define the term scattering. 2
- (b) Discuss signal propagation in wireless communication with diagram. 7
- (c) What are the main problems of signal propagation? 7
- (d) What is diversity and different types of diversity methods? 7