

C033631(033)

B. Tech. (Sixth Semester) Examination, April-May 2022

(AICTE Scheme)

(Information and Technology Engg. Branch)

WIRELESS & MOBILE COMMUNICATION

Time Allowed : Three hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Attempt all questions. Part (a) is compulsory from each question and carry 4 marks. Attempt any two out of part (b), (c) and (d) in each question carry 8 marks.

Unit-I

1. (a) What is medium access control and specialized MAC?
- (b) Explain :
 - (i) Channel assignment strategies

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- (ii) Handoff strategies
- (c) Explain how coverage and capacity in cellular system can be improve.
- (d) Compare SDMA, TDMA, FDMA and CDMA.

Unit-II

- 2. (a) Explain process related with GSM :
 - (i) Authentication
 - (ii) Encryption
- (b) Explain system architecture of GSM.
- (c) Write a short notes on DECT, GPRS and UMTS.
- (d) Discuss protocol architecture for signaling in GSM.

Unit-III

- 3. (a) Explain 802.11 system.
- (b) Compare the performance of DS-SS and FH-SS.
- (c) Explain network architecture and features of IEEE 802.16.
- (d) Discuss in detail about WATM, BRAN and Bluetooth.

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Unit-IV

- 4. (a) Explain snooping TCP in detail.
- (b) Explain the architecture of WAP.
- (c) Explain DHCP.
- (d) Write a short note on IPv6. What advantage does use of IPv6 offer for mobility.

Unit-V

- 5. (a) What makes 5G faster than 4G?
- (b) Explain architecture of 4G network.
- (c) Explain the protocol architecture of 5G network.
- (d) Discuss in detail about LTE, VOLTE.