Sl. No.

B3.E8-R5: WIRELESS & MOBILE COMMUNICATION

NOTE:

- 1. Answer question 1 and any FOUR from questions 2 to 7.
- 2. Parts of the same question should be answered together and in the same sequence.

Total Time: 3 Hours Total Marks: 100

- 1. (a) What are the various units of RF measurements?
 - (b) Explain Analog Modulation Technique.
 - (c) What is cell splitting?
 - (d) Explain 6G in brief.
 - (e) Write in brief about Wi-Fi Security standards.
 - (f) Write short note on WLAN Bridge.
 - (g) Explain wireless sensor network.

(7x4)

- 2. (a) Write in detail, description about IEEE 802.11 architecture.
 - (b) Explain the power management in IEEE 802.11.
 - (c) Describe the mechanism of roaming in IEEE 802.11

(6+6+6)

- 3. (a) What is capacity allocation? Explain the various methods involved in it.
 - (b) Explain the GPRS architecture in detail.
 - (c) Draw architecture for GSM signalling protocol.

(6+6+6)

- **4.** (a) Discuss in detail about wireless communication system.
 - (b) Discuss the different types of spread spectrum.
 - (c) Differentiate between Analog and Digital Modulation Techniques.

(8+6+4)

- 5. (a) Explain in brief about the various routing protocols for WSN.
 - (b) What is WiMax? Also discuss about the WSN Topologies.
 - (c) Differentiate WSN routing with adhoc routing.

(7+6+5)

- **6.** (a) Explain frequency hopping spread spectrum with suitable example.
 - (b) Differentiate between hard and soft handoff.
 - (c) What is cell sectoring? What are the reasons for choosing hexagonal cells?

(6+6+6)

- 7. (a) What are the advantages and disadvantages of Wireless adhoc network?
 - (b) Explain the architecture of Bluetooth.
 - (c) Differentiate between VRAN and ORAN.

(9+5+4)

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