

S.B. Roll. No.....

**WIRELESS AND MOBILE COMMUNICATION**  
**6<sup>th</sup> Exam/ECE/5619/Jun'2021**  
**(For 2018 Batch onwards)**

**Duration: 1.15Hrs.**

**M.Marks:25**

**SECTION-A**

**Q1. Attempt any three questions.**

**3x5=15**

- i. How a geographical area is divided by different cell structures?
- ii. Draw and explain the frequency spectrum.
- iii. What are the advantages of wireless communication?
- iv. Explain the cellular concept.
- v. Why hexagonal shape of cells is preferred in cellular networks.
- vi. Explain the features of FDMA.
- vii. What are the different schemes of spread spectrum?

**SECTION-B**

**Q2. Attempt any one question.**

**1x10=10**

- a. Draw and explain the architecture of UMTS and its features.
- b. Explain cellular network system in detail.
- c. Explain the following propagation considerations      i) Fading      ii) Frequency Reuse.
- d. What is GSM technology? Explain the GSM operation and architecture in detail.