

**Total No. of Questions : 08**

**M.Tech.(ECE) (E-III) (Sem.-3)**  
**WIRELESS & MOBILE COMMUNICATION**  
**Subject Code : EC-520**  
**M.Code : 36221**

**Time : 3 Hrs.**

**Max. Marks : 100**

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1. What are tunneling and grade of service? Discuss the impact of the above terms in designing mobile networks.
2.
  - a) Explain the ground reflection model for radio wave propagation.
  - b) Explain the effect of shadowing in the wireless propagation of waves.
3.
  - a) Explain the GSM traffic channels and its significance in wireless communication.
  - b) What are the various channel allocation schemes in cellular communication?
4. Discuss the various advantages of CDMA, TDMA and FDMA. Explain each access technique in detail with neat diagram.
5. What is GSM technology? With a neat block diagram explain the architecture of GSM in detail.
6. What are the various spread spectrum coding scheme in wireless communication? Explain any one of them with neat block diagram in detail.
7. What is the importance of location tracking mechanism in mobile communication? How will you implement location tracking mechanism in cellular system? Explain it with suitable example.
8.
  - a) Mention the security pitfalls in mobile networks with examples.
  - b) Explain the limitations of TCP for Adhoc networks in brief.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**