

M.Tech. Regular-Semester 2012-Electronics & Communication Engineering Sem II  
**Cellular & Mobile Communication**

P. Pages : 1

Time : Three Hours



**GUG/W/16/5982**

Max. Marks : 70

- Notes :
1. Same answer book must be used for all questions.
  2. All questions carry equal marks. Attempt **any five** question.
  3. Due credit will be given to neatness and adequate dimensions.
  4. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Compare 1G, 2G, 2.5G, 3G & 4G technologies in a detail note. **8**  
b) Explain and compare WLL and WLAN. **6**
2. a) Compare Bluetooth and Zigbee technologies. **6**  
b) Discuss IEEE 802.11 a/b/G and super G stds. **8**
3. a) What do mean by frequency reuse explain with suitable example. **7**  
b) Discuss channel assignment strategies and land off strategies. **7**
4. a) What do you mean by interference and also discuss near and far end interference. **7**  
b) Write a detail note on grade of service and explain steps for improving coverage & capacity. **7**
5. a) Discuss free space propagation model in detail. **8**  
b) Discuss partition losses for same floor and between floors. **6**
- 6 a) What do you mean by fading. Discuss small and large scale fading and factors affecting small and large scale fading. **8**  
b) Explain spread spectrum techniques. **6**
7. Write a detail note on **any two**. **14**  
i) FDMA  
ii) CDMA  
iii) OFDMA
8. a) Write a detail note on SS7 network system. **7**  
b) Write note on **any one**. **7**  
i) ETACS  
ii) GSM System

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