

ET801M - Mobile Communication and Networks

P. Pages : 1

Time : Three Hours



GUG/W/23/14354

Max. Marks : 80

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- Notes :
1. All questions carry marks as indicated.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Give the advantages and disadvantages of circuit switching. 8
b) Write a note on call processing functions. 8
OR
2. a) Explain packet switching in perspective with mobile communication. 8
b) Describe short message service functions. 8
3. a) Explain the concept of frequency reuse in cellular technology. 8
b) Write a note on selection of cluster size for cellular telephone system. 8
OR
4. a) Write short note on hand off strategies in cellular communication. Also give types of hand offs. 8
b) Explain the factors influencing small scale fading. 8
5. a) Explain any four vital characteristics of GSM specifications. 8
b) Draw and explain GSM architecture. 8
OR
6. a) Explain IMEI and IMSI modules. 8
b) Explain the sequence of events when a mobile subscriber makes a call to a PSTN telephone subscriber. 8
7. a) Write a note on types of logical channels in GSM. 8
b) Explain in short time slot hierarchy in GSM. 8
OR
8. a) What are the requirements that any multiple access scheme must be able to meet in GSM. Explain any one multiple access scheme. 8
b) Write a short note on transmission control schemes. 8
9. a) Compare 4G and 5G technology. 8
b) Write a short note on open wireless architecture of 5G network. 8
OR
10. a) Write short note on disruptive technologies for 5G. 8
b) Write short note on LTE frame structure. 8
