



## Mobile Communication (1100)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any five**. Each carries twenty marks.
5. Draw a neat diagram whenever required.
6. Assume suitable data whenever necessary.

1. a) How a cellular telephone call is made? Explain with timing diagram.  
b) Explain Wireless Local Loop (WLL) and Local Multipoint Distribution Services (LMDS).
2. a) Explain frequency reuse concept in cellular network and state formula for N (Cells per cluster).  
b) What is cell splitting? Explain the significance of cell splitting.
3. a) Explain the frequency reuse concept in detail with proper schematic. What is the significance of no of cell per cluster, N.  
b) Explain GSM services and features in detail.
4. a) Explain different types of GSM Channel types.  
b) Explain the frame structure of GSM.
5. a) Explain the factors influencing Small Scale Fading.  
b) What is Fading? Explain Fast and Slow Fading.
6. a) Explain any one Liner Modulation Technique with transmitter and receiver block diagram.

- b) Explain non-linear Equalizer with the help of block diagram.
- 7. a) Explain different quantization techniques.
- b) What is Multiple Access? Explain FDMA system in detail. What is nonlinear effect in FDMA ?
- 8. a) Explain CDMA system in detail with the help of diagram. Explain the features of CDMA.
- b) Explain CDPD, ARDIS and RMD wireless data services.

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