

Roll No .....

**EC-602 (GS)****B.E. VI Semester**

Examination, May 2018

**Grading System (GS)****Cellular Mobile Communication***Time : Three Hours**Maximum Marks : 70*

- Note:** i) Attempt any five questions.  
ii) All questions carry equal marks.

1. a) With the help of block diagram explain the basic operation of cellular system.  
b) Discuss the concept of frequency reuse channels also explain co-channel interference reduction factor.
2. a) Explain the hand off mechanism in cellular mobile communication.  
b) Discuss about mobile point to point model.
3. a) Discuss the propagation of signals over water or flat oper area.  
b) Determine the path loss from point-to-point prediction model.

4. a) What should be cell site antenna height and signal coverage cells?  
b) Determine the equivalent circuits of antennas and discuss gain and pattern relationship.
5. a) Discuss about real time co-channel interference measurement at mobile radio transceiver.  
b) What should be the designing of system to serve a pre defined are that experiences co-channel interference.
6. a) Discuss about different channel assignment techniques.  
b) Explain what is hand off. Also explain types of hand off techniques.
7. a) Explain the GSM architecture.  
b) Explain the principle working of CDMA system.
8. Write short notes on any two of the following:
  - a) Umbrella pattern effect
  - b) Near and Far end interference
  - c) TDD system

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