

Roll No .....  
www.rgpvonline.in**EC-602****B.E. VI Semester**

Examination, June 2013

**Cellular Mobile Communication****Time : Three Hours****Maximum Marks : 100****Minimum Pass Marks :35**

**Note:** i) Attempt one question from each unit.  
ii) All questions carry equal marks.

**Unit - I**

1. a) Discuss briefly about the different performance criteria of cellular mobile communication.
- b) Discuss the concept of frequency re use.

**OR**

2. a) With the help of block diagram explain the operation of cellular systems.
- b) Discuss different hand off mechanisms in cellular system.

**Unit - II**

3. a) Explain the propagation of signals over water or flat open area.
- b) Discuss the gain and pattern relationship of mobile antenna.

**OR**

4. a) Determine the path loss from point to point prediction model.

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- b) Discuss about unique situations of cell site antennas.

**Unit - III**

5. a) Discuss about the real time co channel interference measurement at mobile radio transceivers.
- b) Explain briefly about adjacent channel interference and near and far end interference. How can they be controlled.

**OR**

6. a) How to reduce co channel interference.
- b) What are the effects of coverage and interference by applying power decrease.

**Unit - IV**

7. a) Discuss about the nonfixed channel assignment algorithms.
- b) Derive the drop call rate formula.

**OR**

8. a) What do you understand by traffic and channel assignment.
- b) Explain about mobile assisted hand off and soft hand off.

**Unit - V**

9. Write short notes on the following:
  - a) GSM architecture
  - b) TDD systems.

**OR**

10. Write short notes on the following:
  - a) CDMA system
  - b) PDC system

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