RGPVONLINE.COM

Roll No .....

# 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

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

# OR

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

# Unit - II

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

#### OR

 a) Determine the path loss from point to point prediction model. [2]

b) Discuss about unique situations of cell site antennas.

#### Unit - III

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

#### OF

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

#### Unit - IV

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

### OR

- 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 fc"
  - a) GSM architecture

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b) TDD systems.

### OR

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

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