

Code: R5420401

R05

B.Tech IV Year II Semester (R05) Supplementary Examinations January 2014

CELLULAR & MOBILE COMMUNICATIONS

(Electronics & Communication Engineering)

(For 2006 Regular admitted students only)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Briefly explain the performance criteria of cellular mobile systems.
(b) Discuss in detail about the analog and digital cellular systems.
- 2 (a) Explain the concepts of frequency and reuse channels.
(b) Why the splitting of the cell is necessary? Explain.
- 3 Write short notes on the following:
(i) Co-channel measurement.
(ii) Diversity receiver.
- 4 (a) Explain in detail about the general formula for mobile propagation over water and flat surface.
(b) Write short notes on antenna height gain.
- 5 (a) Write short notes on sum and difference patterns.
(b) Explain about the spaced diversity antennas in detail.
- 6 Write short notes on the following:
(i) Paging channel.
(ii) Sectorization.
- 7 (a) What is handoff? Explain different types of handoffs.
(b) Explain in detail about the forced handoff.
- 8 (a) Explain briefly about the GSM architecture.
(b) Discuss reverse CDMA channels signals in detail.
