

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

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

Examination, December 2017

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. Summarize the main features of 3rd generation mobile phone systems. How do they achieve higher capacities and higher data rates? How does UMTS implement asymmetrical communication and different data rates?
2. Discuss in detail various component of cellular mobile system. Also discuss frequency reuse in it.
3. How is mobility restricted using WLANS? What additional elements are needed for roaming between networks?
4. Compare the complexity the entities involved and the signalling over head of the three basic handover scenarios presented.

PTO

EC-602 (GS)

316

[2]

5. What are the functions of the registration procedure and why is registration needed in addition to handover?
6. Discuss in detail the inference of UHF, TV transmission on mobile systems.
7. What are the differences between destination sequence distance vector and the standard distance vector algorithm? Why is this extension needed?
8. Answer any four of the following:
 - a) Describe in detail hand off mechanism in cellular mobile systems.
 - b) Draw the equivalent circuit of the antennas gain and pattern relationship.
 - c) What are the design aspects of a system to serve a predifed area that experiences cochannel interference.
 - d) Discuss queuing of hand off and power difference hand off in detail.
 - e) What is layer modelling?
 - f) What are the call hand over procedures used in mobile communication.

317

EC-602