

Roll No

EC-7005 (2) (CBGS)**B.E. VII Semester**

Examination, November 2019

Choice Based Grading System (CBGS)**Wireless Communication***Time : Three Hours**Maximum Marks : 70***Note:** i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Discuss the types of services, requirements, spectrum limitation and noise considerations of wireless communications.
b) Write short note on "diffraction of signal".
2. a) Explain the factors that influence small scale fading.
b) What are the factors that cause delay dispersion in a wireless channel.
3. a) Describe the tapped delay line models which can be used to represent WSSVS channel.
b) Explain advantages and disadvantages of the 2-ray ground reflection model in the analysis of path loss.
4. a) Explain the channel models briefly.
b) State the importance of channel sounding.

5. a) Describe the structure of a wireless communication link.
b) Discuss the probability of error in flat-fading channel.
6. a) State clearly the assumptions made in deriving the structure of the optimum receivers for digital modulation.
b) Draw the block diagram of a Decision-Feedback Equalizer and explain it.
7. a) State the main advantage and disadvantage of blind equalization and name three approaches to designing blind equalizers. <http://www.rgpvonline.com>
b) Explain error probability in fading channels with diversity reception.
8. a) Write down short notes on:
i) Micro diversity and macro diversity
ii) Linear equalizer
b) Discuss about antennas for Mobile stations and antennas for Base stations.
