

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2 EXAMINATION- March -2017

M.Tech II Semester

COURSE CODE: 10M11EC212

MAX. MARKS: 25

COURSE NAME: Advance Wireless &amp; Mobile Communication

COURSE CREDITS: 03

MAX. TIME: 1hr 30min

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Q.1 If signal bandwidth becomes greater than the coherence bandwidth of the Rayleigh fading channel then what is the effect on received signal? Justify your answer by considering suitable example. [5 marks]

Q.2 Explain Doppler spectrum for wireless channel using Jakes Model. Where we use Doppler spectrum? What is the significance of Doppler spectrum? [5 marks]

Q.3 Explain how the spreading codes are used to access multiple channels in Wireless Communication. What are the advantages and drawbacks if we use spreading codes? [5 marks]

Q.4 Generate 31 bit long PN sequence using LFSR. Explain balance property of PN sequence code. [5 marks]

Q.5 Differentiate between Delay spread & R.M.S delay spread for Wireless Channel. Find the value of above said spreads for given fig. [5 marks]

