## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT **TEST-1 EXAMINATIONS-2022**

## B.Tech-VI Semester (ECE/CSE/IT)

COURSE CODE: 18B11EC611

MAX. MARKS: 15

COURSE NAME: Wireless and Data Communication

COURSE CREDITS: 03

MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Explain the key differences between 1G, 2G, 2.5G, 3G, and 4G mobile communication standards.

[CO1] [3]

Q.2 Answer the following questions

[CO1] [3]

- a) What are the different multiple access techniques used in wireless communication?
- b) What are the pros and cons of wireless communication?
- c) Write three applications of wireless communications.
- Q.3 Write short notes on:

[CO1, CO2] [3]

- a) WLAN
- b) WMAN
- c) Base band and Band pass signal
- Q.4 How CDMA is different from FDMA and TDMA? Explain with the help of suitable example.

[CO1] [3]

- Q.5 Calculate the change in received signal strengths (in dB) in mobile radio propagation condition at two different distance points and comment on the results obtained. [CO1] [3]
- (a) When the second distance point is twice the distance of the first point.
- (b) When the second distance point is ten times the distance of the first point.