J.C.BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY,YMCA FARIDABAD

Sr. No.

DEC 2018

B.TECH EXAMINATION (Under CBS)

WIRELESS COMMUNICATION (ECE-310)

Time: 3 hrs

M.Marks: 60

PART A

Q1 is compulsory to answer all the questions (2 marks of each) of Part A in short.

Q 1a.	What do you mean by cell ?Why cell is chosen in hexagonal shape	2
b	Why we go for 3G?	2
c	Define Trunking and Grade of Service.	2
d	Define co-channel reuse ratio.	2
e	What do you mean by frequency reuse?	2
f	What is Sectoring	2
g	What do you mean by Hard hand off and Soft hand off?	2
h	What do you mean by Blue Tooth ? Write its specification?	2
i	What are the advantages of Digital techniques in cellular Systems?	2
j	What do you mean by Channel Assignment Strategies	2

PART B

Attempt any four questions from Part B in detail .

Q2a.	Give different phases of development of wireless generation.	5
b.	What do you mean by WLL and explain in detail its architecture?	5
Q3a.	Differentiate between intersystem handoff and intra-system handoff.	5
b.	Draw and explain GSM architecture with placement of BTS, BSC and MSC.	5
Q4 a.	Differentiate between pure ALOHA and slotted ALOHA.	5
b.	What do you understand by CDMA. Enlist its merits and demerits.	5
Q5 a.	Explain the principle of cellular networks	5

5 b.	If a total of 33 MHz of bandwidth is allocated particular FDD cellular telephone system which use two 25 KHz simplex channel to provide full duplex voice and control channels; compute the number of channel available per cell if (i) a system uses a seven cell reuse. (ii)if a system uses a twelve cell reuse	5
Q6a.	What do you mean by intelligent cell. Why it is needed and what are different methods to achieve intelligent system.	5
b	Explain the architecture of ISDN .How is it different from other technologies. What are the difference between N-ISDN and B-ISDN?	5
Q7a	How we can measure the capacity of a digital cellular system? Explain	5
b.	Write short note on Cordless Telephone System.	5