Total number of printed pages: **Programme(D)/V-Semester/DECE-502**

2022

Mobile and Wireless Communication

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any five** questions.*

1.		Write and explain the Kepler's law. Write and explain the important properties of ellipses.	20
2.		Write a short note on 1) TDMA 2) CDMA 3) FDMA	20
3.		Using a table explain the technological differences in 1G, 2G, 3G, 4G and 5G	20
4.		What is the spread spectrum technique in wireless communication? Explain the following in detail i) PN sequence ii) Direct sequence spread spectrum iii) Frequency hopped spread spectrum	20
5.		With a block diagram explain the optical fibre communication system. Explain the roll of the following in the optical fibre communication 1) LASER 2) LED 3) Optical detector	20
6.	(a)	What is Cryptography? With an example explain the following 1) Shared secret key 2) Public key 3) Private key	10
	(b)	With an example explain the difference between symmetric and asymmetric key cryptography.	10