

Department of Electrical Engineering

Assignment

Date: 21/04/2020

Course Details

Course Title: Analog and Digital Communication System

Module: _____

Instructor: _____

Total Marks: 30

Student Details

Name: _____

Student ID: _____

Q.1	(a)	Describe Amplitude Modulation in terms of mathematical expression and diagram. Explain at least two methods how an amplitude modulated signal is generated.	Marks 6
	(b)	Express the difference between Double Sideband, Single Sideband and Vestigial sideband- Suppressed Carrier. Also Explain which one is the most efficient one for transmission.	Marks 4
Q2.	(a)	What is Phase Locked Loop? Explain the working principle of PLL along with mathematical expression and block diagram.	Marks 5
	(b)	Explain the working of Quadrature Amplitude Modulation with the help of diagram and mathematical expression.	Marks 5
Q3.	(a)	How A Frequency modulated signal is generated. Explain the processes with the help of diagram and mathematical expressions.	Marks 6
	(b)	What is the difference between frequency modulation and phase modulation? support your answer with the help of mathematical expressions and diagram	Marks 4