

Daffodil International University
Department of Electrical and Electronic Engineering
Faculty of Engineering

Mid Term Examination of Summer – 2021

Course Code – EEE 311

Course Title –Communication Engineering

Instructor's Initial: JAH

L/T: 2-2

Section: A

Shift: Eve

SET: A

Answer all the questions.

1	Provide a brief overview of the elements of a generalized communication system.[CO-1]	5
2	In a particular communication channel the signal power is 250 Watt and noise power is 0.5 Watt. If the noise power is reduced to 35% of present value what will the change in SNR in Decibel. [CO-2]	5
3	A baseband signal with 20 kHz bandwidth has average power of 15 W If it is transmitted by a channel which has noise power= 3 W If you are told to double the channel capacity while signal keeping bandwidth constant what change will you make in signal characteristics and how much change will you make? [CO-2]	5
4.	Suppose in envelop detection modulation technique ,the message signal is a sinusoidal signal with amplitude of 6.5 Volt and the carrier signal is a high frequency carrier signal with amplitude of 10 Volt . Sketch modulated signal with proper scaling of the amplitude of the signal. [CO-3]	5
5.	Describe coherent detection modulation and demodulation technique with proper mathematical expressions. [CO-3]	5