

Department of Electrical Engineering

Final term exam

Date: 23/09/2020

Course Details

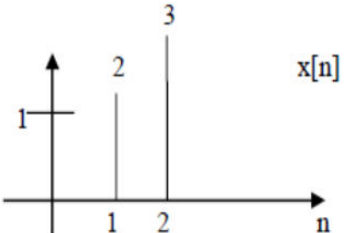
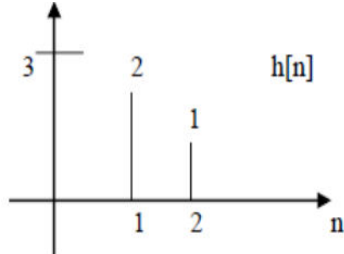
Course Title: Signals & Systems
Instructor: _____

Module: 04
Total Marks: 50

Student Details

Name: _____

Student ID: _____

Q1.	Identify the basic difference between a periodic and an aperiodic signal using examples.	Marks 06 CLO 1
Q2.	$f(x) = \begin{cases} 0 & -\pi \leq x \leq 0 \\ \pi & 0 \leq x \leq \pi \end{cases}$ Retrieve the Fourier series for the given function.	Marks 12 CLO 3
Q3.	If $X(z) = \frac{2z^2 + 2z}{z^2 + 2z - 3}$ Retrieve $x[n]$ using inverse Z-transform method.	Marks 10 CLO 3
Q4.	If $x[n] = 4\delta[n] - 3\delta[n - 1] + 4\delta[n - 2]$ $h[n] = 2\delta[n - 1] - 3\delta[n - 2] + 2\delta[n - 3]$ Produce $Y(z)$ and $y[n]$	Marks 10 CLO 3
Q5.	Evaluate $y[n]$ using convolution summation. <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	Marks 12 CLO 2