

Department of Electrical Engineering

Assignment

Date: 20/08/2020

Course Details

Course Title: Linear Circuit Analysis

Semester: Summer-20

Instructor: _____

Total Marks: 30

Student Details

Name: _____

Student ID: _____

Q1.	(a)	What is the main difference between a lumped network and distributed network?	Marks 05
	(b)	Why do we mostly use parallel electrical connection in house wiring?	Marks 05
Q2.	(a)	What is the importance of Ohm's Law for a student of Electrical Technology/Engineering?	Marks 05
	(b)	Why the resistance increases with temperature in conductors?	Marks 05
Q3.		<p>In the network shown below, find the magnitude of current by Mesh current method:</p> <p>The circuit diagram shows a network with three meshes. The left mesh contains a 100V DC source (V1) and a 40Ω resistor (R1). The middle mesh contains a 20Ω resistor (R2). The right mesh contains a 60V DC source (V2) and a 60Ω resistor (R3). The nodes are labeled A, B, C, and D. Node A is at the top left, B is at the top middle, C is at the top right, and D is at the bottom center. The bottom wire connects A, B, C, and D.</p>	Marks 10