R	A	2	1						

## COLLEGE OF ENGINEERING & TECHNOLOGY, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Cycle Test – I SET- A

Academic Year: 2021-2022 (EVEN SEM)

Program offered: B.Tech

Year / Sem: I/II

Course Code and Title: 18EES101J/BASIC ELECTRICAL

AND ELECTRONICS ENGINEERING

**Maximum Marks: 25** 

Date and Time: 21/04/2022 and 08:00 am to 08:50 am

	Learning Assessment (CLA 1)								
Levels	Level of Thinking	Weightage Required (%)	Weightage Provided(%)						
1	Remember Understand	40%	40%						
2	Apply Analyze	60%	60%						

## **PART A (Answer all the questions)**

3vA	$\mathbf{N}\mathbf{I}\mathbf{A}$	DK-	-12	$\mathbf{M}$	RKS

	PART A (Answer an the questions)	3X4 MARK=12 MARKS				
Q. No.	Questions	Refer ence to CO	Refer ence to PO	Bloom's Taxonomy	Marks Allotted	Marks Scored
	a. Find the voltage $V_1$ , $V_2$ & $V_3$ in the given circuit using voltage division rule					
1.	$I = 5 \Omega \qquad R_2 = 10 \Omega \qquad R_3 = 15 \Omega$ $V1 \qquad V2 \qquad V3$ $V_3 = 30 V$	CO1	1	Understand	4	
	b. Give the transient current response equation with the graph of an R-C series circuit.					
2.	State Maximum power transfer theorem. Explain briefly the procedure to arrive at its equivalent circuit.	CO1	1,2	Apply	4	
3.	Convert given delta circuit to its equivalent star form, if $R_{12}=8~\Omega,~R_{23}=4\Omega$ and $R_{13}=6\Omega$	CO1	1,2	Understand	4	

Q. No.	Questions	Refer ence to CO	Refer ence to PO	Blooms Taxonomy	Marks Allotted	Marks Scored
4a.	Using nodal analysis, find the current in $4\Omega$ resistor of the given circuit $ \begin{array}{c c} & & & & & & & & & & & & \\ & & & & & & $	CO1	1,2	Apply	13	
	(OR)					
4b.	Find the current through $3\Omega$ resistor of the given circuit using Thevinin's & Norton's theorem $ \begin{array}{c c} & & & & \\ & & & & \\ & & & & \\ & & & & $	CO1	1,2	Apply	13	

CO ASSESSMENT							
Course Outcomes	Marks Allotted	Marks Scored					
CO1	25						
CO2	-	-					
CO3	-	-					
CO4	-	-					
CO5	-	-					
CO6	-	-					
Total	25						

**Total Marks Scored:** 

**Signature of the Faculty**