



**K. K. Wagh Institute of Engineering Education and Research,
Nashik**

(An Autonomous Institute from A. Y. 2022-23)

Marking Scheme

End-Sem Examination-I, Winter 2025

Academic Year: 2025-2026	Semester: I
Class: FY	Program: BTech
Branch Code: ETC	Pattern: 2023
Name of Course: Electrical Network	Course Code: 2300118E

Q. No.	Answer Details	(stepwise marks)	Max. Marks		
Q.1.	Conversion of a voltage source into a current source	3	6		
	Conversion of a current source into a voltage source	3			
Q.2.	Draw the phasor diagrams of an ideal resistor, ideal inductor and ideal capacitor.	2	6		
		2			
		2			
Q.3.	A Laplace Transform Laplace transform of $(t) = e^{-at}$	2 6	8		
	OR				
	B KVL LT of $v(t)$ $I(S)$ $i(t)$	2	8		
		2			
		2			
		2			
	C Finding constants ILT	4 4	8		
		OR			
	D Definition of Unit Step function LT	4 4	8		
		OR			
Q.4.	A Definition and expressions of Y-parameters Matrix relation	4 4	8		
	OR				
	B 2M for each component	8	8		
		OR			
		C Definition and expressions of h-parameters Matrix relation		4 4	8
OR					
	D 2M for each component	8	8		
		OR			
Q.5.	A Star to Delta conversion Explanation	4 4	8		
	OR				
	B Average value RMS Value	4 4	8		
		OR			
	C Impulse function Properties	4 4	8		
		OR			



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	D	2M for each parameter	8	8
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