

 SIES Graduate School of Technology RISE WITH EDUCATION (Affiliated to University of Mumbai)		End Semester Examination (R-24) SH 2025 Answer Key with marking scheme	
Branch: ECS		Course: Electronic Devices and Circuits	
Year/ Semester: SE/ III		Course code:ECC304	
Time: 02 hours		Marks: 60	
			Marks
Q. 1	Attempt any FOUR. (All questions carry equal marks)		15
A.	Diagram+ Explanation(02+03)M		05
B.	Diagram+ Explanation(02+03)M		05
C.	$V_m = V_{h(rms)} \times \sqrt{2}$ $V_m = 23.0 \times 1.41421356 = 32.5269119346 \text{ V} \approx 32.5269 \text{ V}$ $V_{DC} \approx 20.71 \text{ V}$ 2M $PIV \text{ (Centre-Tapped FWR)} = 2V_m$ 2M 65V 1M		05
D.	Equation 2M, explanation 3M		05
Q.2	Attempt any FOUR. (All questions carry equal marks)		30
A.	Explanation 2M, diagram and load line 4M, equations 4M		10
B.	Diagram 3M, Equations 4M explanation 3M		10
C.	Diagram 2M, derivation for each point 2M (8M)		10
D.	Diagram 2M, Explanation 5M Characteristics 3M		10
E.	explanation 4M diagram=2M waveforms 2M and equations 2M		10
Q.3	Attempt any FOUR. (All questions carry equal marks)		15
A.	Diagram=2M, explanation 3M		05
B.	Each valid point carry 1M		05
C.	Diagram=2M, explanation 3M		05
D.	LC filter= 2.5M and CLC filter=2.5M		05