J.C. Bose University of Science and technology, YMCA, Faridabad B. Tech 1st semester Mechanical Engineering Sessional 2nd (Electrical Technology (ESC-101))

	Time 90 minutes Attempt any three questions.	Max. Marks 15
Q1.		5
Q2.	What is series resonance? Derive the expression for resonant frequency in R-L-C series circuit.	5
Q3.	Draw and explain the two wattmeter method of power measurement in a three phase circuit.	5
Q4.	Derive emf equation for single phase transformer. Draw phasor diagram of single phase transformer for inductive and capacitive load.	5
Q5.	Explain working of auto transformer. What are the advantages of auto transformer over two winding transformer?	5