


SCHOOL OF ELECTRICAL ENGINEERING
CONTINUOUS ASSESSMENT TEST - I
FALL SEMESTER 2025-2026

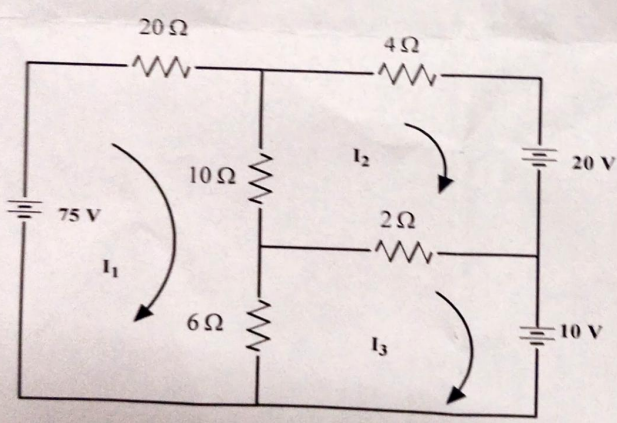
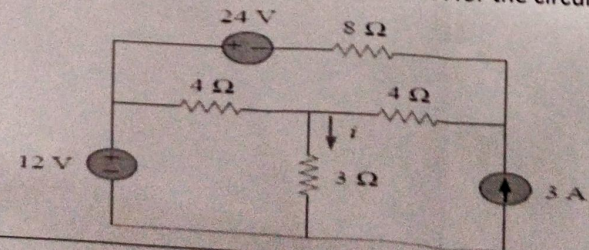
Programme Name & Branch : B Tech CSE & IT
 Course Code and Course Name : BAEEEE101 and Basic Engineering
 Faculty Name(s) : Dr K Sathish Kumar, Dr Gnanavignesh R, Dr Mrtunjaya Panda, Dr Uma Satyakam P, Dr Chilukuri Venkaat M, Dr Shankardoss V, Dr Rashmi Ranjan Das, Dr K Subramanian.
 Date of Examination : 17 /08/2025
 Exam Duration : 90 minutes
 Maximum Marks: 50

General instruction(s):

- Answer All Questions
- Rough work should not be done on question paper. It will be treated as malpractice.
- M - Max mark; CO - Course Outcome; BL - Blooms Taxonomy Level (1 - Remember, 2 - Understand, 3 - Apply, 4 - Analyse, 5 - Evaluate, 6 - Create)

Course Outcomes Statements:

CO. 1: Analyse the electrical circuits, electrical motors and the role of power electronics industrial applications.

Q. No	Question	M	CO	BL
1.	Calculate the mesh currents for the circuit shown below 	10	1	3
2.	Use superposition theorem to find current i for the circuit given 	10	1	3



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3.	Draw the Thevenin's equivalent circuit for the circuit shown below			
		10	1	3
4.	The resistance of $12\ \Omega$, inductance of 0.15H and a capacitance of $100\mu\text{F}$ are connected in series with the 100 V and 50 Hz supply. Calculate the impedance, current, voltage across R , L & C and the phase difference between current and supply voltage.	10	1	3
5.	Explain the construction of single-phase transformer with neat diagram	10	1	1
