

End Semester/Reappear (Semester I) Examination December, 2024

Programme: BMLT

Course: Basic Electrical & Electronics

Course Code: 42ABMT106

Enrolment no. _____

Full Marks: 70

Time: 3 Hrs.

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks	
Section I					
1	Short Answer type questions.				
a	Write down the differences between Active Elements and Passive Elements. or	CO1	Remember	4 x 5 = 20	
	Write down the differences between Linear Elements and Non-linear Elements.	CO1	Remember		
b	Explain the meaning of Average Value & RMS Value of the AC Quantity. or	CO2	Understand		
	What do you understand by KCL and KVL in an Electric Circuit?	CO2	Understand		
c	Differentiate between ideal and practical transformer. or	CO3	Remember		
	Describe the different types of the transformer.	CO3	Remember		
d	Write short note on BJT. or	CO5	Understand		
	Write short note on Adder & Subtractor.	CO5	Remember		
Section II					
Long Answer type questions.					
2	Four resistances of 5Ω each are connected in parallel form find the equivalent resistance of the circuit. or	CO1	Understand	3 x 10 = 30	
	Draw the series and parallel connection of capacitors.	CO1	Understand		
3	Write down the difference between single phase and three phase AC system. or	CO2	Remember		
	Explain the concept of resonance in RLC series circuit.	CO2	Understand		
4	Write down the difference between CFL and LED lights. or	CO4	Remember		
	Write down the difference between fuse & Circuit Breakers.	CO4	Understand		
Section III					
Application based questions					
5	Describe the constructional features of DC motor in details. Also write down the advantages and applications of DC Motor. or	CO3	Analyze		1 x 20 = 20
	Describe the construction of the transformer also write down the working and applications of transformer.	CO3	Analyze		

COURSE OUTCOME

CO1 Develop the essential skills for understanding and interpreting DC circuits.

CO2 Learn and analyse AC circuits.

CO3 Learn and appreciate the operation and applications of motors & generators and electrical safety systems.

CO4 Acquire necessary ability to distinguish between various semiconductor materials and devices.

CO5 Learn and apply BJTs & Op-Amps to realize simple analog and mathematical operations.