

Course Code/Name : BE3251 Basic Electrical and Electronics Engineering

Regulation : R2021

Branch : Common to CSE, IT, AIDS, CSBS, BME and MECH

UPC – Student Planner

Slot	Unit .No.	Name of the Unit	Questions	CO Mapping	Grade	
					A	B
1	I	Electrical Circuits	<ol style="list-style-type: none"> Problems based on Kirchoff's Current law Problems based on Kirchoff's Voltage law Problems based on mesh analysis Problems based on nodal analysis Problems based on RL, RC and RLC 	C112.1	3 4 5	1 2
2	II	Electrical Machines	<ol style="list-style-type: none"> Construction, Working, Types and EMF equation of DC generator Construction, Working, Types and Torque equation of DC Motor Construction, Working, Types and EMF equation of Single phase Transformer Construction, Working, Torque equation of Three phase alternator Construction, Working, Torque equation of Three phase Synchronous motor Construction, Working, Torque equation of Three phase Induction motor 	C112.2	1 2 3 6	4 5
3	III	Analog Electronics	<ol style="list-style-type: none"> PN junction Diode, Zener diode: Construction, Working, VI Characteristics and applications Construction, Working, VI Characteristics and applications of CB and CE configuration JFET: Construction, Working, VI Characteristics and applications DE-MOSFET, E-MOSFET: Construction, Working, VI Characteristics and applications IGBT: Construction, Working, VI Characteristics and applications Rectifier: Construction, working and output waveforms Inverter: Construction, working and output waveforms 	C112.3	1 2 4 6	3 5 7
4	IV	Digital Electronics	<ol style="list-style-type: none"> Problems based on number conversions Adder and Subtractor circuits Problems based on 3 variable K-Map Problems based on 4 variable K-Map 	C112.4	1 2 3 4	
5	V	Measurements and Instrumentation	<ol style="list-style-type: none"> PMMC and MI instruments Block diagram of DSO Energy meter Data Acquisition system Three phase power measurement Instrument Transformers (CT, PT) 	C112.5	1 2 3 5	4 6
6	Part-A Questions					

Prepared By

Verified By

Approved By