Reg. No. : | | | | | | | | | | | | |

Question Paper Code: U8367

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

One credit

Electrical and Electronics Engineering

21UEE867-ENERGY STORAGE SYSTEMS

(Regulations 2021)

Duration: 1.30 Hours | Maximum: 50 Marks

Answer All Questions

PART – A (5 x 10= 50 Marks)

1.	(a)	Analyze the operation of pumped storage plant for supplying the peakload.	CO3 Ana	(10)
		Or		
	(b)	Compare the energy storage technologies based on efficiency, cost, application, and technical characteristics.	CO3 Ana	(10)
2.	(a)	Explain in detail about the operation of compressed air storage during off peak hoursand peak hours.	CO1 U	(10)
		Or		
	(b)	Explain in detail about the thermal energy storage system	CO1 U	(10)
3.	(a)	Explain in detail about the operation of flywheel for smoothing uneven loads.	CO1 U	(10)
		Or		
	(b)	Explain in detail about the magnetic energy storage system	CO1 U	(10)
4.	(a)	Explain the fundamental operation of electrochemical cell	CO1 U	(10)
		Or		
	(b)	Explain the operation of zinc-Air battery	CO1 U	(10)
5.	(a)	Analyze the charging and discharging of lead acid battery.	CO3 Ana	(10)
		Or		
	(b)	Analyze the charging and discharging of lithium battery.	CO3 Ana	(10)