Sanjay Ghodawat University, Kolhapur

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

2020-21

EXM/P/09/00

Year and Program: TY B Tech	School of Commerce and Management	Department: Electrical Engineering
Course Code: ELE103	Course Title: Battery Management System	Semester :VI
Day and Date:	End Semester Examination	Time:2 Hrs. Max Marks:50

Instructions: 1) All Questions are compulsory.

Q.1		Answer/Solve the following (any Two)	Marks	Bloom's Level	CO
	a)	Explain the Lead Acid Battery design and construction in details.	8	L2	CO1
	b)	Discuss the Fuel cells design and construction.	8	L2	CO1
	c)	Shirt note on related to Battery a) Charge capacity b) Power density. c) Energy stored. d) Energy efficiency.	8	L4	CO2
Q.2		**Answer/Solve the following (any two)**			
	a)	Explain in details state of charge Estimation and State oh health estimation.	8	L1	CO2
	b)	Explain the following terms a. Cell voltage, module voltage, Pack voltage. b. Cell and module temperature. c. Pre-charge temperature.	8	L2	CO3
	c)	Write the comparison between passive and active, liquid and air thermal control system configurations for EV application	8	L3	CO3
Q.3		**Answer/Solve the following (any two)**			
	a)	Describe in details types of Dynamometer.	9	L4	CO4
	b)	Explain in details types of sensors used in EV.	9	L3	CO4
	c)	Discuss in detailthe Principle of Inductive EV charging, With block diagram.	9	L3	CO3

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