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: Final Year B.Tech	**School of Technology: Technology**	**Department:Mechanical**
Course Code: MET4094	**Course Title: Electric Vehicles**	**Semester : VII**
Day : Tuesdady **Date: 29.12.2020**	**End Semester Examination**	**Time:2 Hrs.** **Max Marks:50**

Instructions: 1) All Questions are compulsory.
2) Read the questions very carefully and choose the assumption accordingly

		Marks	Bloom's Level	CO
Q.1	**Answer the following (any Two)–**			
a)	How does EV beneficial when compared with IC engine car?	8	L1	CO1
b)	Explain various configurationsin Electric Vehicle?	8	L2	CO1
c)	Explain the dynamic effects in Electric Vehicle?	8	L3	CO2
Q.2	**Answer the following (any two)**			
a)	Draw the block diagram of Hybrid Electric Vehicle and explain the operation?	8	L2	CO2
b)	Design principle for series hybrid electric drive train?	8	L3	CO1
c)	Explain Various architectures of Hybrid Electric Vehicle?	8	L1	CO1
Q.3	**Answer the following (any two) –**			
a)	Explain types of Batteries for EVs & HEVs?	9	L2	CO4
b)	Visualize the construction of PMSM with detailed diagram	9	L4	CO1
c)	Explain principal and operation of BLDC Motor	9	L3	CO4