Total No. of Questions : 6] SEAT	No ·
SEA1	
P5872 BE/Insem./Oct568	[Total No. of Pages : 1
B.E. (Electrical)	
ELECTRIC AND HYBRID VEHICLE	
(2015 Pattern) (Elective - II) (Semester	,
Time: 1 Hour]	[Max. Marks: 30
Instructions to the candidates:	
1) Neat diagrams must be drawn wherever necessary.	Co
2) Figures to the right indicate full marks.	(9)
3) All questions carry equal marks.	
4) Assume suitable data, if necessary.	
Q1) a) Explain History of Electric Vehicle.	[4]
b) Explain need and importance of transportation deve	
OR	
Q2) Explain basic of vehicle performance with its characteriza	ation. [10]
Q3) a) Explain Battery based energy storage and its analysi	
b) Explain Ultra capacitor based energy storage and its	s analysis. [5]
OR CHILL I	1
Q4) Explain Hybridization of energy storage for Hybrid and El	lectric venicles.[10]
Q5) Explain charging algorithm and balancing method for batter	y nack charoing [10]
25) Explain charging argorithm and balancing method for batter,	y pack charging.[10]
OR	\$ 5.7
Q6) a) Explain Thermal monitoring of battery unit.	9 [4]
b) Explain Battery management system representation.	$\begin{array}{cccc} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & $
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