

Total No. of Questions : 4]

SEAT No. :

PB119

[Total No. of Pages : 1

[6269]-333

T.E. (Electrical) (Insem)

ELECTRICAL MOBILITY

(2019 Pattern) (Semester - II) (Elective - II) (303151B)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve questions Q1 or Q2 and Q3 or Q4.*
- 2) *Each question carry 15 marks.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

- Q1)** a) Need and importance of Hybrid Electric and Electric vehicle. [7]
- b) Draw and explain Architecture of Series Hybrid Electric Drive with advantages and applications. [8]

OR

- Q2)** a) State and explain the challenges in Electric and Hybrid Electric Vehicle. [7]
- b) Draw and explain Architecture of Parallel Hybrid Electric Drive with advantages and applications. [8]

- Q3)** a) Compare lead acid battery and Lithium Ion Battery. [7]
- b) Explain Hybridization of various energy storage device and its advantages. [8]

OR

- Q4)** a) Which are the factors to be considered while selecting energy storage device. [7]
- b) Explain with neat diagram the Fuel cell Based Energy storage system with its advantages and applications. [8]

