

Total No. of Questions : 4]

SEAT No. :

PA-10050

[Total No. of Pages : 1

[6009]-333

T.E. (Electrical) (Insem)
ELECTRICAL MOBILITY

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

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

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

Q1) 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]

OR

Q2) a) Need and important of Hybrid Electric and Electric Vehicle. [7]

b) Explain the Rolling Resistance and Aerodynamic Drag. [8]

Q3) 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]

OR

Q4) a) Compare lead acid battery and Lithium Ion Battery. [7]

b) Explain the Hybridization of various energy storage devices and its advantages. [8]

