

Total No. of Questions : 4]

SEAT No. :

PA-10341

[Total No. of Pages : 1

[6009]-445

T.E. (Mechanical Engineering) (Insem.)

ELECTRIC VEHICLES (Honors)

e-Vehicle System Design

(2019 Pattern) (Semester - II) (Elective - II) (302033MJ)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Two questions from the following (questions Q.1 or Q.2, Q.3 or Q.4)*
- 2) *Draw neat labeled diagrams wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Use of non-programmable electronic calculator is permitted.*
- 5) *Assume suitable/standard data if necessary.*

Q1) a) Explain topology design of bicycle. [7]

b) What are the types of steering system and explain any two. [8]

OR

Q2) a) Explain how a car steering system works. [8]

b) Explain 2W configuration of bicycle/dicycle layout. [7]

Q3) a) Explain different types of Front and Rear Suspension System. [8]

b) Explain Shock Absorbers in suspension system. [7]

OR

Q4) a) Explain design of Coil Spring. [8]

b) What is suspension system and how it works in automobile. [7]

