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SEAT No. :

P5166

[Total No. of Pages : 2

**B.E./Insem. - 570-A**

**B.E. (Electrical)**

**INTRODUCTION TO ELECTRICAL TRANSPORTATION  
SYSTEMS**

**(2012 Pattern) (Elective - II)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates :*

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

**Q1) a)** Write the advantages and disadvantages of Elevator. **[4]**

b) Explain the airways mode of transportation with advantages and disadvantages. **[6]**

OR

**Q2)** Explain the importance and evolution of transportation systems in society. **[10]**

**Q3) a)** Define following terms **[4]**

i) State of Charge

ii) Depth of Charge

b) Explain Metal-Hydride battery in detail with characteristics. **[6]**

OR

**Q4)** Explain impact of battery disposal on ecosystem. **[10]**

*P.T.O.*

- Q5) a)** Compare all types of power converter used in transportation systems. **[4]**
- b) Explain DC to AC converter for electric car with neat diagram. **[6]**

OR

- Q6)** Explain power train architecture of hybrid cars. **[10]**

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