SEAT No. :

BE/INSEM/APR-549
B.E. (Electrical)
403150A : SMART GRID
(2015 Pattern) (Semester - II) (Elective - IV)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

1) *Attempt Q.No.1 or Q.No2, Q.No.3 or Q.No.4, Q.No.5 or Q.No.6.*
2) *Neat diagram must be drawn wherever necessary.*
3) *Figures to the right indicate full marks.*
4) *Assume suitable data, if necessary.*

Q1) a) What is the need of Smart Grid? What will be the components of Smart Grid? **[5]**

b) State and Explain the challenges for Smart Grid. **[5]**

OR

Q2) a) Define Smart Grid and give its functions. **[5]**

b) Give present development and international policies in smart grid. **[5]**

Q3) a) Explain the concept Plug in Hybrid Electric Vehicles. **[5]**

b) Explain phase measurement unit and its importance in smart grid. **[5]**

OR

Q4) a) Write a note on Remote Terminal Unit with block diagram and write a function of each block. **[5]**

b) Explain, the "Feeder Automation". **[5]**

Q5) a) What is meant by Smart Sensors? Give and explain some smart sensors. **[6]**

b) Write a note on, "Real Time Prizing". **[4]**

OR

Q6) a) What is Geographic Information System (GIS)? Explain the components of GIS. **[6]**

b) Explain how automatic meter reading can make the system Smarter. **[4]**

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