

Total No. of Questions : 6]

SEAT No. :

[Total No. of Pages : 1

P219

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.No.2, 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 Pricing". [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]

