

Total No. of Questions : 6]

SEAT No. :

P38

[Total No. of Pages : 1

APR.-17/B.E./Insem. - 42
B.E. (Electrical Engineering)
SMART GRID
(2012 Pattern) (Semester - II) (Elective - IV)

Time :1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve Q1 or Q2, Q3 or Q4, Q5 or Q6.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable additional data, if necessary.*

Q1) a) Compare Conventional Grid and Smart Grid. [5]

b) Write a note on Smart Grid pilot projects in India. [5]

OR

Q2) a) Explain the concept of Resilient and Self Healing Grid. [5]

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

Q3) a) Explain the function of Intelligent Electronic Devices & their application for monitoring & protection. [6]

b) Name different Smart storage technologies, and explain any one in detail. [4]

OR

Q4) a) Explain Phase Measurement Unit and its importance in smart grid. [6]

b) How smart grid can be benefited by implementing PHEV technology? [4]

Q5) a) What is the role of Advanced Metering Infrastructure (AMI) in Smart Grid? [5]

b) State and explain briefly the components of Geographic Information System (GIS). [5]

OR

Q6) a) How outages can be managed by OMS? [5]

b) Explain how Automatic Meter Reading can make the system smarter. [5]

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