

B. Tech. Sem –VIII (Electrical Engg.) (2014 COURSE) (CBCS) :
SUMMER - 2019

SUBJECT: 2) ELECTIVE-IV SMART GRID

Day: Thursday
Date: 30/05/2019

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

S-2019-2896

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data with necessary.

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- Q.1** a) What is self healing grid **(05)**
 b) State present development and international policies in smart grid **(05)**

OR

- Q.1** a) Name and explain few pilot projects of smart grid in India **(05)**
 b) Differentiate between conventional and smart grid **(05)**

- Q.2** a) Explain SMES **(05)**
 b) Comment on optimal location of PMUs **(05)**

OR

- Q.2** a) Draw and explain working of V2G **(05)**
 b) Compare super capacitors and SMES **(05)**

- Q.3** a) Enlist smart appliances available in market **(05)**
 b) What is AMR **(05)**

OR

- Q.3** a) Compare conventional and smart meters **(05)**
 b) Give example of building automation **(05)**

- Q.4** a) Compare smart and micro-grid **(05)**
 b) State the necessity of cyber controlled smart grid **(05)**

OR

- Q.4** a) Explain green micro-grid with examples **(05)**
 b) What is grid islanding **(05)**

- Q.5** a) Define power quality and its parameters **(05)**
 b) Explain EMC in smart grid **(05)**

OR

- Q.5** a) What are PQ issues in smart grid **(05)**
 b) Explain with sample report – power quality audit **(05)**

- Q.6** a) Compare Bluetooth, WiFi and WiMax **(05)**
 b) Explain wireless mesh network **(05)**

OR

- Q.6** a) Explain communication architecture of smart grid **(05)**
 b) State the role of cloud computing in smart grid **(05)**

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