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Question Paper Code: 95T29

Ph.D. COURSE WORK EXAMINATION, NOV 2019

Elective

Power Electronics and Drives

19PPE529 – SMART GRID

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) Describe the desirable features and characteristics of an ideal smart grid. CO1- U (5)

Or

- (b) Explain about the forced drivers, which demands smart grid. CO1- U (20)

2. (a) Explain the outage management system principles and integration requirement. CO2-Ana (10)

Or

- (b) Explain the concept and working principle of plug in hybrid electric vehicle. CO2-Ana (20)

3. (a) Explain about AMI protocols, standards and initiatives used in smart grid. CO3- U (20)

Or

- (b) Explain the basics of Intelligent Electronic Devices (IED) & their applications for monitoring & protection of smart grid operation. CO3-U (20)

4. (a) Explain the need and procedure of web based Power Quality monitoring. CO4- Ana (20)

Or

- (b) Discuss the step by step procedure of Power Quality audit. CO4- Ana (20)

5. (a) Describe and explain the various layers of Internet protocol layer. CO5- U (20)

Or

(b) Explain the role of significance of Cyber Security for Smart Grid. CO5- U (20)
