

Roll No.

Total No. of Pages : 01

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M.Tech. (EE) (Power Systems & Renewable Energy) (Sem.-2)

SMART GRIDS

Subject Code : PSRE-204B/21

M.Code : 91876

Date of Examination : 12-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.

1. Explain what do you understand by smart grid. Differentiate between conventional and smart grid.
2. What are the functions of smart grid? Discuss the opportunities and barriers to smart grid.
3. Define the following :
 - a) Real time pricing
 - b) Automatic meter reading.
4. How the substation automation, feeder automation helps in making the grid smart?
5. Discuss the role of intelligent electronic devices & their applications for monitoring & protection.
6. Explain the concept of micro grid, its need and applications.
7. Explain the web-based power quality monitoring system in smart grid.
8. Write a short note on :
 - a) Advanced metering infrastructure
 - b) Home area network.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.