Department of Electrical Engineering Assignment

Date: 14/04/2020

Course Details			
Course Title:	Smart Grid Technologies	Module: Total Marks:	3 30
	Student Details		
Name:		Student ID:	

INSTRUCTIONS:

- 1. Answers to all the following questions must be submitted in form of one *Research Paper*.
- 2. Each answer must be supported by related research articles (at least 3)
- 3. The answers must be in your own words and references must be cited wherever it is necessary
- 4. Plagiarized content will <u>NOT</u> be accepted (Max allowed similarity Index: 15%)
- 5. The solution must be uploaded before the end of deadline mentioned on the <u>Online Portal</u> of subject.

Questions

- 1) Present in detail the problems and limitations of existing electric grid. How does unreliability of existing grid system results in loss of billions of dollars to the consumers?
- 2) Why should pursue a smart grid? If it should, what functions should the smart grid address?
- 3) Smart grid is customer oriented. What does this term mean and how does this relate to efficiency of grid?
- 4) Are customers interested in receiving advanced energy and other informational services through the electricity grid? How can this have monitory benefits for the customers and other stakeholders?
- 5) A smart grid network consists of a number of components. Discuss the its major components and operations in an integrated system.