Name: Enrolment No:



## UNIVERSITY OF PETROLEUM & ENERGY STUDIES

End Semester Examination (Online) – July, 2020

**Program:** MBA Power Management

Subject (Course): Distribution Automation & Smart Grid

Course Code : PIPM 7008

Semester – II Max. Marks: 100 Duration: 3 hrs.

## IMPORTANT INSTRUCTIONS

- 1. The student must write his/her name and enrolment no. in the space designated above.
- 2. The questions have to be answered in this MS Word document.
- 3. After attempting the questions in this document, the student has to upload this MS Word document on Blackboard.

		Marks	COs
Q.1	How prepaid metering and IoT will help in reducing Discom losses. Explain with a suitable example.	20	CO2/CO3
Q.2	There are 5 Business Models mentioned under NSGM. Which business model will you suggest implementing (say you are a consultant to a DISCOM) and explain with proper arguments for the following Smart Grid Technology?  A. Renewable Energy Integration B. Energy Efficiency	20	CO1/CO3
Q.3	What are the open source tools and technologies available for Smart Grid. Critically analyze the HDFS and Map Reduce function of HADOOP for Big data analysis	20	CO1/CO2
Q.4	Critically analyze 6LOWPAN and SMQTT	20	CO3
Q.5	6 keywords are the objectives of Ministry of Power. They are "Reliability, Safety, Accessibility, Quality, Affordability and Availability". How Smart Grid implementation can help in achieving the objectives mentioned in quotes with suitable example?	20	CO4