



Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2023

Program: MBA Power Management

Semester – II

Subject (Course): Power Sector Automation & Smart Grid

Max. Marks: 100

Course Code : PIPM 7009

Duration: 3 hrs.

Instructions:

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Complete the Abbreviations • MQTT • RFID	2	CO1
Q2.	Give 2 examples of Data protocols	2	CO1
Q3	Give 2 examples of communication protocol	2	CO1
Q4	Who creates standards for smart grid technologies in India?	2	CO1
Q5	What is the role of BEE in Indian energy sector?	2	CO1
Q6	Blockchain consumes huge amount of energy. Is the statement True or false?	2	CO1
Q7	Which international body frames the standard of IoT?	2	CO1
Q8	What are Actuators?	2	CO1
Q9	What is channel efficiency?	2	CO1
Q10	What do you mean by quality of electricity?	2	CO1

SECTION B
4Qx5M= 20 Marks

Q 11	Describe SMQTT?	5	CO2
Q 12	Describe the functions of Mapreduce and DFS.	5	CO2
Q 13	What is the role of NLDC and SLDC in Smart transmission network?	5	CO2
Q 14	Name any 5 factors on which energy demand forecasting is done.	5	CO2

SECTION-C 3Qx10M=30 Marks			
Q 15	Analyze the differences between SPARK and HADOOP.	10	CO3
Q 16	How Sustainable development is related to a Smart Grid development projects. Answer with proper arguments.	10	CO3
Q 17	With help of a block diagram explain the role of AWS service implementation in Utility Sector	10	CO3
SECTION-D 2Qx15M= 30 Marks			
Q18	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? Explain for any one Technology	15	CO4
Q19	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?	15	CO4