Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2025

Course: Energy Analytics and Modeling **Semester:** II
Program: MBA Power Management **Time** : 03 hrs.
Course Code: PIPM8012P **Max. Marks: 100**
Instructions: Set2

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Complete the Abbreviations a. IIOT b. NLP	2	CO1
Q2.	What is Energy Analytics? Describe in short.	2	CO1
Q3	What is Predictive Analysis? Explain	2	CO1
Q4	What is usages of Data Analysis? Explain.	2	CO1
Q5	Describe Prescriptive Analysis.	2	CO1
Q6	What is Diagnostic Analysis? Explain.	2	CO1
Q7	What is Cognatic Analysis? Explain.	2	CO1
Q8	Explain process of Data Analysis.	2	CO1
Q9	What are full forms of SCADA and GIS?	2	CO1
Q10	Explain Descriptive Analysis.	2	CO1

SECTION B
4Qx5M= 20 Marks

Q 11	Explain Big Data and IOT with its usages in Power Sector.	5	CO2
Q 12	Describe GIS and SCADA and its usages in Power Sector with examples.	5	CO2
Q 13	What is Smart Grid? Explain roles of IT for this.	5	CO2
Q 14	"Cloud Computing can play a great role in Energy Sector" - explain with examples.	5	CO2

SECTION-C 3Qx10M=30 Marks			
Q 15	Explain and critically evaluate roles and applications of AL and ML in Power sector with suitable examples.	**10**	**CO3**
Q 16	"We are under Digital Transition which is going to affect Indian Power Sector drastically" – Critically evaluate this statement.	**10**	**CO3**
Q 17	How IT and Energy Analytics will effect of Economy, Environment and overall Sustainability in Energy Sector? Explain with examples.	**10**	**CO3**

SECTION-D
30 Marks

Q 18. Discuss the importance of energy analytics in the energy sector. Name various tools used in energy analytics. Select any one application in details.