Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, May 2021

Course: Energy Analytics **Semester: II**
Program: MBA Business Analytics **Time 03 hrs.**
Course Code: DSBA 8007P **Max. Marks: 100**

SECTION A

1. **Each Question will carry 5 Marks**
2. **Instruction: Complete the statement / Select the correct answer(s)**

S. No.	Questions	CO
Q1	Energy analytics can be applied in the field of a) Wind Energy b) Electrical Energy c) Solar Energy d) None of the above e) All of the above	CO1
Q2	"The judicious and effective use of energy to maximize profits and enhance competitive positions". This can be the definition of: a) Energy conservation b) Energy management c) Energy policy d) Energy Audit	CO1
Q3	Smart Meters are used for a) Calculating the energy units consumed b) Detecting electrical faults in a building c) Storing Electrical Data d) Option a) and b) are correct e) Option b) and c) are correct f) Option a) and c) are correct	CO4
Q4	One can substitute non-renewable energy with renewable energy when _____.	CO1
Q5	The five elements of energy management cycle are _____, _____, _____, ____ and _____.	CO1
Q6	Smart Grids facilitate one-way communication only.	CO4

	Please state whether the above statement is a) True b) False	
	SECTION B **1. Each Question will carry 10 Marks** **2. Instruction: Write short or Brief Notes**	
Q7	Explain the advantages of using Smart Grids and Smart Meters through big data. Answer point wise (mention any four advantages of Smart Grids and Smart Meters).	CO4
Q8	What are the two types of demand forecasting in the energy sector? Differentiate.	CO3
Q9	What are upstream sector, downstream sector, and midstream sector in oil and gas operations?	CO3
Q10	Draw and label the energy management cycle as discussed in class.	CO2
Q11	Explain the solution development process for demand forecasting in the energy sector. OR Mention and explain the industry applications of Business Intelligence from the viewpoint of energy analytics.	CO4
	SECTION C **1. Each Question will carry 20 Marks** **2. Instruction: Write long answers**	
Q12	How do you apply predictive analytics to deliver smart power outage communications? OR Explain the six benefits of energy demand forecasting.	CO4