Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2023

Course: Energy Trade & Risk Management Program: BBA Oil & Gas Marketing Course Code: OGET3003 Semester: 6<sup>th</sup> Time: 03 hrs. Max. Marks: 100

## Instructions:

SECTION A 10Qx2M=20Marks				
S. No.		Marks	CO	
Q1.	<ul> <li>Which of the following is not a financial derivative?</li> <li>a) Swap</li> <li>b) Option</li> <li>c) Forward</li> <li>d) Contango</li> </ul>	2	CO1	
Q2.	What are two types of options from the perspective of the right to trade?	2	CO2	
Q3.	<ul> <li>A large, sudden increase (or less often, decrease) in energy prices, especially the price of crude oil in the world market, is generally termed as <ul> <li>a) Oil shock</li> <li>b) Price shock</li> <li>c) Market shock</li> <li>d) None of these</li> </ul> </li> </ul>	2	CO2	
Q4.	Futures Contracts are contracts that can be settled in cash or settled by delivery depending on the terms of the contract as decided by the exchange (True/False)	2	CO1	
Q5.	What is the significance of the strike price in an option?	2	CO2	
Q6.	<ul> <li>A European Option <ul> <li>a) Can be exercised anytime during the life of the Option</li> <li>b) Can be exercised only at maturity</li> <li>c) Is traded only on the European Exchange</li> <li>d) Is a floating rate option</li> </ul> </li> </ul>	2	CO2	
Q7.	Briefly define a Market.	2	CO1	
Q8.	An agreement to subscribe to a newspaper at a specified price at a future date. (True/False)	2	CO1	
Q9.	A trader enters into a long position in the Put Option. What is his current position in the market?	2	C01	
Q10.	Power Exchanges in India are an OTC Trading Platform. (True/False)	2	C01	

	SECTION B			
4Qx5M= 20 Marks				
Q11.	Differentiate between American and European Options.	5	CO2	
Q12.	Discuss the need for Markets.	5	CO3	
Q13	Discuss the various risk types in the bilateral power market.	5	CO3	
Q14	Discuss the Monte Carlo method of calculating of VaR?	5	CO2	
	SECTION-C 3Qx10M=30 Marks			
Q13.	Discuss the advantages of Trading Futures Contracts.	10	CO3	
Q14.	<ul> <li>Value of the portfolio: INR 200,000</li> <li>Duration of the Investment: 1 month</li> <li>Standard Variation: 10%</li> <li>Calculate the Value at Risk at a 5% level of significance.</li> <li>a) In terms of value</li> <li>b) In terms of the percentage of the portfolio</li> </ul>	10	CO4	
Q15	Discuss the importance of Trading Swaps.	10	CO3	
	SECTION-D			
	2Qx15M= 30 Marks		-	
Q16	<ul> <li>In the capacity of the power purchase in charge of a power trader, you are the coordinator of a power purchase bilateral contract.</li> <li>The seller and buyer have expressed their concerns over the risk involved. <ul> <li>a) Which clauses of the power purchase agreement will you include to eliminate/mitigate the following risks: <ul> <li>i. Credit Risk</li> <li>ii. Operational Risk</li> </ul> </li> <li>b) In context of the Indian Market, is it possible to mitigate price risk in the electricity market. <ul> <li>i. If Yes, How?</li> <li>ii. If No, Why?</li> </ul> </li> </ul></li></ul>	30	CO4	