Name: **Enrolment No:**	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2023

Course: Power Pricing & PPA **Semester: III**
Program: MBA Power Management **Time : 03 hrs.**
Course Code: PIPM-8003 **Max. Marks: 100**
Instructions:

SECTION A
10Qx2M=20Marks (Answer All Question)

S. No.		Marks	CO
Q 1	What is the SHR? Explain.	**2**	**CO1**
Q 2	What do you mean by the term PPA? Why it is called as PPA not PSA or PS&PA?	**2**	**CO1**
Q 3	Explain PLF, PAF & CUF with stating relationship among them.	**2**	**CO1**
Q 4	Name Minister of Power and Minister of Petroleum & Natural Gas for India.	**2**	**CO1**
Q 5	What do you mean by Working Capital? Explain.	**2**	**CO1**
Q 6	What is Current Installed Capacity of India Fuel wise.	**2**	**CO1**
Q 7	Write full form of RDSS, GCI & RPC.	**2**	**CO1**
Q 8	What is secondary fuel in TPP based on coal? Give maximum quantity per unit of generation (KWh) one can use for 500 TPP Unit as per CERC order.	**2**	**CO1**
Q 9	Explain Accelerated Depreciation.	**2**	**CO1**
Q 10	What do you mean by term Force Majeure? Explain in short.	**2**	**CO1**
	SECTION B **4Qx5M= 20 Marks**		
Q 1	Give major components of Capacity and Energy Charge of Tariff for a Coal based TPP.	**5**	**CO2**
Q 2	What is the significance of Working Capital in TPP? Explain with writing major components of it for calculation of Thermal Power Project in any state of India.	**5**	**CO2**
Q 3	Describe the Risk and Risk Management for any project in Power Sector.	**5**	**CO2**
Q 4	Why Solar Price is coming down? Give at least five major reasons.	**5**	**CO2**
	SECTION-C **3Qx10M=30 Marks**		
Q 1	Write major parts of PPA for any Discom purchasing Electricity from TPP for 25 years with needful explanations?	**10**	**CO3**
Q 2	Analyze the India growth plan for Renewable Energy up to 2030 with suggestions for better implantation.	**10**	**CO3**

Q 3	Analyze the Hydrogen Mission and related Green Hydrogen Policy with your suggestions for effective implementation after stating Opportunities & Challenges for it.	**10**	**CO3**
SECTION-D **2Qx15M= 30 Marks**			
	Calculate the Tariff for Solar Plant of 500 MW capacity with help of Following parameters: 1. Capital Cost = Rs. 5 Crores per MW 2. Interest on debt = 10 % per Annum 3. Interest on working capital= 10 % per Annum (Assume working capital as 10% of Capital Cost) 4. CUF= 20 % and Depreciation= 6 % per annum 5. RoE= 14 % per annum 6. O&M Cost – 5 Lakhs per MW per Year 7. Assume other things as CERC order 2020.		
Q1	Calculate the Tariff for Solar PV Plant of 100 MW capacity per KWh.	**15**	**CO4**
Q 2	How you can bring down this tariff to around Rs. 3 per KWh. Please suggest with explanations.	**15**	**CO4**