Name:

**Enrolment No:** 



## **UPES**

## **End Semester Examination, December 2023**

Course: Regulatory Framework for Green Energy & Sustainability Semester: III

Program: BBA GES

Course Code: OGET 2004

Time : 03 hrs.

Max. Marks: 100

**Instructions:** 

## SECTION A 10Qx2M=20Marks

S. No.		Marks	СО
Q 1	What is Additional Surcharge?	2	CO1
Q 2	Write down the full form of NLDC and RLDC	2	CO1
Q 3	Name the regulatory body of upstream sector of Oil & Gas sector in India	2	CO1
Q 4	What is RoE in NTP 2019?	2	CO1
Q 5	In which year India's first law for environment protection was implemented?	2	CO1
Q 6	What is PCB?	2	CO1
Q 7	Who is the Cabinet minister of MNRE?	2	CO1
Q 8	What is the capital cost of Small Hydro power plants for Himalayan states?	2	CO1
Q 9	Name 4 Social drivers for framing any policy.	2	CO1
Q 10	What is Vertical disintegration?	2	CO1
	SECTION B 4Qx5M= 20 Marks		
Q 1	Explain PLF, PAF & CUF with stating relationship among them. What are CUFs for Solar PV and Wind Energy Power Plant in India as per CERC.	5	CO2
Q 2	What is the role of CERC and SERC in Indian power sector.	5	CO2
Q 3	Why is O&M cost not fixed for Solar PV power plants as per Renewable Energy tariff policy in India?	5	CO2
Q 4	What is Energy Security? Why the term important for India?	5	CO2
	SECTION-C 3Qx10M=30 Marks		
Q 1	Analyze the costs involved as a part for finalizing the landed cost of electricity. Explain with a schematic diagram.	10	CO3
Q 2	Analyze the Indian Power trading contracts as per Power Market Operation Regulations	10	СОЗ
Q 3	Analyze the role EA 2003 in India Power sector	10	CO3
	SECTION-D 2Qx15M= 30 Marks		

	Calculate the Tariff for Wind Plant of 50 MW capacity with help of		
	Following parameters:		
	1. Capital Cost = Rs. 6 Crores per MW		
	2. Interest on debt = 10 % per Annum		
	3. Interest on working capital= 9 % per Annum (Assume working capital as		
	10% of Capital Cost)		
	4. CUF= 30 % and Depreciation= 6 % per annum		
	5. RoE= 14 % per annum		
	6. O&M Cost – 5 Lakhs per MW per Year		
Q 1	Calculate tariff for one unit of Power for first year of Operation.	15	CO4
Q 2	How you can bring down this tariff to Rs. 2 per Kwh. Please suggest with explanations.	15	CO4