

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM & ENERGY STUDIES
End Semester Examination – January 2022

Program: MBA - PM
Subject/Course: Power Economics
Max. Marks: 100
Course Code: ECON 7008

Semester: III

Duration: 3 Hours

IMPORTANT INSTRUCTIONS

1. *The student must write his/her name and enrolment no. in the space designated above.*

Q.No	Group – A Each question will carry 02 marks. All questions are compulsory	Marks	COs
1	Define Open Access	2	CO1
2	Mention different categories of power consumers	2	CO1
3	What is current share mix of power from thermal, large hydro and renewables?	2	CO1
4	Mention India's rank on ease of getting electricity index by World Bank	2	CO1
5	Is CERC the supreme authority in the regulation of Power Sector?	2	CO1
6	State two important role of Indian Electricity Grid Code (IEGC)	2	CO1
7	Give two reasons of failures of grid code	2	CO1
8	Mention two important objectives of Paris Agreement	2	CO1
9	Define conservation of energy	2	CO1
10	What is the objective of Multi-Year-Tariff (MYT)-framework	2	CO1

Q.No.	Group – B Each question will carry 05 marks. All questions are compulsory	Marks	Cos
11	Elaborate the features of power sector regulation in India	5	CO1
12	How usage big data analytics can improve efficiency in power sector	5	CO2

13	Discuss the important objectives of COP 21	5	CO2
14	Discuss effectiveness of Kyoto Protocol in India	5	CO2

Q.No.	Group – C Each question will carry 10 marks. Answer any three	Marks	COs
17	Analyze the role of digitalization in power generation, transmission and distribution	10	CO3
18	Discuss the important features of Electivity Act 2003	10	CO2
19	Analyze the different components of power tariff	10	CO4
20	Give the justification for cross – subsidy in Indian power sector	10	CO4
21	Elaborate the structure of power sector in India	10	CO4

Q.No.	Group – D Q4. Analytical /Case Study questions. Answer all the questions given at the end of the case study. 15 X 2 = 30	Marks	COs
	<p>Despite the encouraging growth trajectory in the energy space over the last few years, the Indian Power sector has still not been able to induce and sustain the required capacity addition matching the ever growing power demand of the country.</p> <p>Five Key Challenges facing the Energy Sector</p> <p>a. Fuel Security Concerns: Thermal capacity addition is plagued by the growing fuel availability concerns faced by the Industry. While a significant gas based capacity of more than 20,000 MW is idle due to non-availability of gas. Coal supplies by CIL is restricted to around 65% of actual coal requirement by coal based thermal plants, leading to increased dependence on imported coal with the cascading result of high power generation costs.</p> <p>b. Financial Health of State Discoms: Years of populist tariff schemes, mounting AT&C losses and operational inefficiencies have adversely</p>		

	<p>affected the financial health of State Discoms which are currently plagued with humongous out-standing debts.</p> <p>c. Under-procurement of Power by States: Increasing power generation costs due to limited fuel availability, poor financial health of State Discoms, high AT&C losses have contributed in suppressed demand projections by State Discoms.</p> <p>d. Inimical Financing Environment: Over the last 4-5 years, the leading rates have increased significantly from the time of project appraisal resulting in project cost overrun and hence higher end tariffs.</p> <p>e. Policy Paralysis: The micro level policies governing the fuel cost pass-through, mega power policy, competitive bidding guidelines are not in consonance with the macro framework like The Electricity Act 2003 and the National Electricity Policy.</p>		
Q22.	In the light of the above analyze the challenges of power sector in India	15	CO4
Q23.	Suggest some measure for the solution of the problems	15	CO4