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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2020

Program: MBA (Power Management) **Semester – III**
Subject (Course): Wind and Alternative Sources of Energy **Max. Marks: 100**
Course Code : PIPM 8002 **Duration : 3 Hrs**
No. of page/s: 2

Section – A (5 marks * 6 = 30 Marks)

Briefly explain the following: **(CO1)**

1. Wind Atlas
2. Generation Based Incentive
3. Biomass Gasification
4. Bio-CNG
5. Cut-in Speed of Wind Turbine
6. Offshore Wind power project

Section – B (10 marks * 5 = 50 Marks)

Answer all questions in this section: **(CO2)**

1. Discuss the various options to improve wind power at a particular site.
2. Assuming yourself as a policymaker, discuss policy measures that can help create a market for biogas run vehicles.
3. It has been observed that the wind power industry is going for larger and larger wind turbines. Discuss the reasons for such a trend.
4. Discuss Sweden's waste management practices (including waste to energy practices) that make it a world leader in this area.

5. Most of the offshore wind power projects are located in European Union countries. Explain the reasons for such a trend.

Section – C (20 marks * 1 = 20 Marks)

(CO3)

1. RPO, Feed-in Tariff, Generation Based Incentive, Accelerated Depreciation and other incentives have been used worldwide for creating an initial market for wind power. Explain how these instruments and incentives have created an initial market for wind power in India. Additionally, discuss the role of competitive bidding in making stable wind power market efficient, competitive and transparent.