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**UNIVERSITY OF PETROLEUM & ENERGY STUDIES
DEHRADUN**

End Semester Examination-April 2018

Program/course: MA – Economics

Subject: Renewable Energy and Efficiency Economics

Code : ECON 8004

No. of page/s: 03

Semester : IV

Max. Marks : 100

Duration : 3 Hrs.

Group A: Objective Questions.

Q1. A. Answer all the questions.

02X10 = 20

- a. In which year PAT mechanism was introduced?
- b. Mention two quantitative methods of analyzing renewable energy demand
- c. What is the percentage growth of renewable energy in 2016-17?
- d. Mention the fixed cost components of Renewable energy
- e. Give an example of economic cost
- f. Mention two important project viability factors of Renewable Energy Projects
- g. What is meant by variability in renewable energy generation?
- h. What is feed –in- tariff?
- i. Mention, which five states in India are having highest solar power potential in descending order?
- j. What is price learning curve?

Q1. B. Short Questions

4 X 5 = 20

Answer any five questions.

- a. Give the overview of renewable energy sources
- b. Discuss the maturity of selected renewable energy technologies of Biomass, Geothermal, Hydro, Marine, Solar and Wind
- c. What are the enablers of green energy corridors?
- d. Discuss the policy support for renewable energy in India
- e. Discuss the market design for renewable energy in India
- f. What is PAT Mechanis? What are the importance of PAT Mechanism?

Group C: Descriptive type questions

15 X 2 = 30

Answer any two questions.

- a. Discuss the project viability factors of renewable energy projects in India.

- b. Analyse the sectoral disaggregated analysis of energy demand.
- c. Analyse the drivers of demand and supply of renewable energy in India.

Group D: Analytical questions

Answer all questions.

15 X 2 = 30

Q1. What are the challenges for renewable energy grid integration in India? Suggest some measures to mitigate those challenges.

Q2. Analyse the development of renewable energy industry – the current trends and future prospects.