

## UNIVERSITY OF PETROLEUM & ENERGY STUDIES

## **DEHRADUN**

## **End-semester Examination – April, 2017**

Name of the Program: MBA (Power) Semester – IV

Subject Name : Integrated Power Resources Management Max. Marks : 100

Subject Code : MDSP 865 Duration : 3 Hrs

## Answer all questions. Marks are indicated against each question.

- 1. Briefly explain the following: (2 marks \* 5 = 10 marks)
  - a) Electricity-GDP Elasticity
  - b) Sustainable Development
  - c) Energy Access
  - d) Demand Side Management
  - e) Energy mix
- 2. Enlist the factors that affect growth in power demand of a country. (5 marks)
- 3. List the common objectives that are aimed to plan for integration of various power resources. (5 marks)
- 4. Electricity-GDP elasticity is used by planning agencies to plan for India's power generation capacity requirement in future. Exhibit with the help of an example. (10 marks)
- 5. For integrating various power resources to the grid, smart grid is a necessity. Justify. (10 marks)
- 6. Masdar City project is a wonderful example of optimum integration of various resources. Discuss the salient features of the project that exhibit such integration of resources. (15 marks)

- 7. Worldwide, countries are incorporating more and more renewable energy in their energy mix.

  Discuss the reasons for such a trend and illustrate India's stand. (15 marks)
- 8. Initially, the experiments with PV projects in Sagar Islands were quite successful in improving energy access but later on it turned out to be unsustainable. Comment. (15 marks)
- 9. Husk Power System has been very innovative in market identification, delivery of service, power delivery to poor households and power theft prevention. Justify. (15 marks)