

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, January 2021

Program: MBA (Power Management)

Semester – I

Subject (Course): Power Generation and Power Station Management

Max. Marks: 100

Course Code : PIPM 7001

Duration : 3 Hrs

No. of page/s: 2

Section – A (5 marks * 6 = 30 Marks)

Briefly explain the following:

(CO1)

- 1. Availability
- 2. Auxiliary Power Consumption
- 3. Saubhagya Scheme
- 4. Variable Renewable Energy
- 5. Base Load Power Plants
- 6. Peak Load Power Plants

Section – B (10 marks *5 = 50 Marks)

Answer any five questions:

(CO₂)

- 1. Why electricity (power) is considered as the most favored form of energy?
- 2. What makes management of power so challenging?
- 3. Discuss the merits and demerits of nuclear power plants.
- 4. From the perspective of satisfying the electricity needs of a country like India, it is unfair to compare 1 MW of thermal power (coal or gas based) capacity with 1 MW of renewable power (solar or wind) capacity. Justify.

- 5. From economics and sustainable development perspective, hydro power has a big role to play in Indian power sector. Justify.
- 6. Discuss the factors responsible for large-scale adoption of Solar PV technology worldwide.

Section – C (20 marks *1 = 20 Marks)

Answer any ONE question from this section:

(CO3)

Discuss AT&C Losses and its impact on power sector in India.

OR

Renewables, electricity storage mechanisms and electric vehicles are changing the landscape of power sector like never before. In light of these technology interventions, discuss the future of Indian power sector.