

M.B.A. - II (CBCS Pattern) Semester-IV  
**SP03 / PCB4EJ3 - Energy Systems Planning**

P. Pages : 1

Time : Three Hours



**GUG/S/25/10736**

Max. Marks : 70

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- Notes : 1. Attempt **any five** questions.  
2. All questions carry equal marks.

1. What challenges and opportunities do renewable energy sources present in the context of energy system planning? **14**
2. How can renewable energy contribute to Sustainable Development Goals (SDGs)? **14**
3. Discuss the importance of energy efficiency and technological innovation in achieving sustainability. **14**
4. Define and discuss the key types of energy models used in energy planning and management. **14**
5. Explain the concept of techno-Economic models and their relevance in energy system planning. **14**
6. What does a “system approach” mean in the context of energy policy? how does it differ from traditional sectoral or silo-based approach? **14**
7. What methodologies are commonly used to estimate national energy demand & supply? **14**
8. Who are the key actors at the national, regional and settlement level. **14**
9. How do energy demands in agriculture fluctuate across seasons, and what implications does this have for energy planning? **14**
10. Write short note **any two**. **14**
  - a) Renewable energy sources
  - b) Econometric models
  - c) IAMs (Integrated Assessment Models)
  - d) GIS (Geographic Information Systems)

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