

**B. SC. (APPLIED SCIENCE-  
ENERGY) (BSCAEY)**

**Term-End Examination**

**December, 2025**

**BEY-002 : ENERGY RESOURCES**

*Time : 3 Hours*

*Maximum Marks : 70*

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**Note :** *Attempt any **seven** questions. All questions carry equal marks.*

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1. Discuss in detail the scenario of Indian oil, coal and natural gas reserves. 10
2. (a) What is coalification ? Explain. 5  
(b) Give in detail about the rank and grade of coal. 5
3. Compare Liquefied Petroleum Gas (LPG) and Compressed Natural Gas (CNG) in detail. 10

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4. What is the purpose of control rods in a nuclear fission ? Also, discuss about the control rod materials and design. 10
5. Explain the construction and working of a pyrhelimeter. 10
6. Discuss the various applications of photovoltaics. 10
7. Derive the theoretical maximum power that can be extracted from wind (based on Betz's law). 10
8. Describe in detail the properties and characteristics of biogas. 10
9. Write short notes on any *two* of the following : 5+5
  - (a) Tidal Energy
  - (b) Bio-energy
  - (c) Solar Cooker

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