

Code No: 158DE

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech IV Year II Semester Examinations, September - 2022

ENERGY SOURCES AND APPLICATIONS

(Common to CE, ME, ECE, CSE)

Time: 3 Hours

Max.Marks:75

**Answer any five questions
All questions carry equal marks**

1. What are different energy sources available worldwide? How the different energy sources play a major role in the development of a nation? [15]
- 2.a) How an energy source can influence economy of a country – Discuss.
b) What do you think about India's oil imports? Is it good for India's development? Justify your answer. [7+8]
3. Write an overview about different energy systems, their transformation and about their efficiency and storage. [15]
4. As an energy manager working in India, What kind of renewable energy projects will you suggest to the government and tell about its advantages and disadvantages. [15]
- 5.a) Explain with examples any one method for storing energy for future use.
b) In the Indian context why regeneration of energy is essential? [8+7]
6. Write a detailed note on High Efficiency batteries and tell how energy is stored in that. [15]
7. By giving examples for future energy sources, explain in detail about how economic and environmental policy can guide as in choosing an energy source. [15]
- 8.a) What do you know about LEED ratings? Explain.
b) Define Energy Audit and tell about the process of energy audit. [7+8]

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