

**DIPLOMA IN ELECTRICAL ENGINEERING
(DELVI)**

Term-End Examination

June, 2016

00586

BIEE-038 : ENERGY AUDIT

Time : 2 hours

Maximum Marks : 70

Note : *Attempt any seven questions. All questions carry equal marks. Use of scientific calculator is permitted.*

1. What do you understand by an energy audit ?
Discuss its role in detail. 10
2. What are the various social and economic cost-benefit aspects associated with energy analysis ? 10
3. What are the different energy sources available in India ? Discuss the change in renewable energy usage in India in the last ten years. 10
4. Explain the principles of multi-objective energy management with emphasis on conservation. 10

5. What is the objective of per capita energy consumption and carbon emission ? 10
6. What do you understand by energy conservation ? Propose some energy conservation techniques in domestic use. 10
7. Differentiate between post-audit and pre-audit processes for an industry. 10
8. Discuss the auditing procedures in detail. 10
9. Write short notes on any *two* of the following : $2 \times 5 = 10$
- (a) Long-term Energy Scenario
 - (b) Alternative Energy Resources
 - (c) Energy Analysis of Transportation Systems
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