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R-15

Code: 5G286

IV B.Tech. II Semester Supplementary Examinations July 2021

Energy Auditing and Demand Side Management

(Electrical and Electronics Engineering)

Max. Marks: 70

Time: 3 Hours

Answer any five full questions by choosing one question from each unit (5x14 = 70 Marks)

Marks	CO	Blooms Level
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UNIT-I

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|-----------|---|-----|-----|----|
| 1. | What is an energy audit? Explain the significance of energy audit. | 14M | CO1 | L1 |
| OR | | | | |
| 2. | Discuss in detail about Energy index, Cost index, pie-charts and load profiles. | 14M | CO1 | L2 |

UNIT-II

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|-----------|---|-----|-----|----|
| 3. | Explain in detail how to conserve electrical energy and explain some of the means to conserve energy. | 14M | CO1 | L2 |
| OR | | | | |
| 4. | List the types of energy conservation methods and discuss their merits and demerits | 14M | CO1 | L1 |

UNIT-III

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|-----------|--|-----|-----|----|
| 5. | Describe the constructional details and characteristics of energy efficient motor. What are the factors affecting the efficiency of motor? Write merits and demerits of energy efficient motors. | 14M | CO2 | L3 |
| OR | | | | |
| 6. | Discuss in detail about good lighting system design and practice. | 14M | CO2 | L2 |

UNIT-IV

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|-----------|---|-----|-----|----|
| 7. | Explain in detail about data loggers and thermocouples. | 14M | CO3 | L2 |
| OR | | | | |
| 8. | Discuss the depreciation methods followed for economical methods with examples. | 14M | CO3 | L3 |

UNIT-V

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|-----------|---|-----|-----|----|
| 9. | a) Define 'demand side management' and state its features. | 7M | CO4 | L1 |
| | b) Explain any two DSM techniques in detail. | 7M | CO4 | L2 |
| OR | | | | |
| 10. | Discuss management and organization of energy conservation awareness programs | 14M | CO4 | L2 |
