

Code No: H2102/R13

M. Tech. II Semester Regular/ Supplementary Examinations, July-2016

ENERGY MANAGEMENT

(Thermal Engineering)

Time: 3 Hours

Max. Marks: 60

Answer any FIVE Questions
All Questions Carry Equal Marks

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| 1. a | Explain the principles of energy management in detail. | 7 |
| b | What are the steps you might consider in setting up an energy management program? | 5 |
| 2. a | What is the role of energy manager in manufacturing industry? Discuss. | 6 |
| b | List out the tools commonly needed for energy audits and explain any three. | 6 |
| 3. a | State and explain any four forms of energies with two examples of each. | 7 |
| b | Briefly explain the technologies for energy conservation. | 5 |
| 4. a | Discuss Indian energy scenario. | 6 |
| b | What do you understand by investment project? Explain. | 6 |
| 5. a | Explain the different types of depreciation. | 6 |
| b | Briefly discuss about the budget considerations in economic analysis. | 6 |
| 6. a | Write short notes on payback and annualized costs. | 8 |
| b | Indicate the limitations of present worth and internal rate of return methods. | 4 |
| 7. a | Explain the pros and cons of the energy collection devices with neat sketch. | 6 |
| b | Name the different types of solar collectors and explain any one. | 6 |
| 8. a | Explain the Nomenclature of solar cells. | 6 |
| b | Explain the Rotor blade motions and their causes in wind turbines. | 6 |
