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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**I Year M.Tech II Semester (R16) Regular Examinations May/June 2017****ENERGY MANAGEMENT**

(Thermal Engineering)

(For Students admitted in 2016 only)

Time: **3 hours**Max. Marks: **60**(Answer all Five Units **5 X 12 =60** Marks)**UNIT-I**

- Q.1** a. What are the objectives of Energy management? 6M
b. Write about Energy management in Process Industry? 6M

OR

- Q.2** a. What is the scope of Energy management? 4M
b. What are the necessary steps in Energy management program me? 8M

UNIT-II

- Q.3** a. What is the significance of knowing Energy costs? 4M
b. Generate a report for presentation of Energy Audit results. 8M

OR

- Q.4** a. Define Energy Index, Cost Index and Pie chart with examples. 6M
b. Write about Energy Audit in foundry. 6M

UNIT-III

- Q.5** a. What is the scope and nature of economic analysis? 4M
b. Differentiate between micro economics and macro economics. 8M

OR

- Q.6** a. What is meant by Risk analysis? When to use it? 4M
b. Give the detailed steps of Risk analysis. 8M

UNIT-IV

- Q.7** a. What is meant by project evaluation and Monitoring? 4M
b. Explain payback method with an example. Mention its advantages. 8M

OR

- Q.8** a. Explain the necessity and responsibility of Energy consultant. 4M
b. What is the selection criteria for an Energy consultant? 8M

UNIT-V

- Q.9** a. Discuss about the different technologies to harness solar energy . 6M
b. What are the advantages and disadvantages of solar energy? 6M

OR

- Q.10** a. Explain in detail about types of concentrating collectors. 6M
b. Write about TES heating and cooling applications? 6M

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