INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)

B.Tech VI Semester End Examinations (Regular), November – 2020
Regulation: IARE–R16
ENERGY AUDIT AND MANAGEMENT
Time: 2 Hours   **(EEE)**   **Max Marks: 70**

Answer any Four Questions from Part A
Answer any Five Questions from Part B

PART – A

1. What are the significant aspects of knowing the energy costs? **[5M]**

2. Give details of past and present energy scenario. **[5M]**

3. Explain various requirements to perform energy action plan with an suitable example. **[5M]**

4. What is energy efficiency? Explain its first and second laws of energies. **[5M]**

5. Explain the essential elements of monitoring system. **[5M]**

6. Write briefly about the following: i) Energy index ii) Pie charts **[5M]**

7. Explain the energy balance diagram. **[5M]**

8. Write a short note on i) Contact thermometer ii)Infrared thermometer **[5M]**

PART – B

9. What is energy management? Illustrate general principles of energy management. **[10M]**

10. Explain the how the energy audit process is performed in industries. **[10M]**

11. What is the importance and content involved in plant energy study report? Explain inventory of energy inputs and rejections. **[10M]**

12. Explain about energy audit report. What are the main aspects of audit report? **[10M]**

13. An energy audit has to be carried out on an industry. As an energy manager, how would you conduct the audit and present a report. **[10M]**

14. Why do you motivate employees? Discuss in detail, how employees actively participate in the process of energy audit for the development of organization. **[10M]**

15. Why energy flow is depended on process flow? Explain the procedure for drawing process flow chart. **[10M]**

16. Write about Management Information System. List the various facilities provided as an energy system. **[10M]**

17. What are the desired quantities to be measured in the process of energy audit? Write its importance in the energy audit. **[10M]**

18. Explain in detail about WPitot tube. Write about manometer. **[10M]**

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