

SUBJECT CODE NO:- P-8132
FACULTY OF ENGINEERING AND TECHNOLOGY
M.E.(Electrical Power System) Examination MAY/JUNE-2016
EI-1 Energy Audit & Conservation
(Revised)

[Time: Three Hours]

[Max Marks:80]

“Please check whether you have got the right question paper.”

N.B 1) Answer any two full questions from each section.

Section A

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| Q.1 | a) What do you mean by co-generation? Explain giving an example & block diagrams. | 10 |
| | b) With neat sketches, explain working significance & limitations of solar water pumping system. | 10 |
| Q.2 | a) Explain in details the internal rate of return method; justify by giving an example. | 10 |
| | b) What are the objectives of energy conservation? How will you achieve the objectives with motors? | 10 |
| Q.3 | a) Write the features of energy efficiency motors & explain European arrangement on LV electric motor efficiency. | 10 |
| | b) Explain in details “Implementation of motor management program”. | 10 |

Section-B

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| Q.4 | a) Explain in details, the concept of energy input to different loads in an industrial agricultural & commercial sector? | 10 |
| | b) Explain the concept of “Power demand monitoring” & how will you apply it in a domestic sector? | 10 |
| Q.5 | a) Explain the least square method for energy audit by giving suitable example. | 10 |
| | b) Explain key features of IS12615 & IEEMA standards. | 10 |
| Q.6 | a) What specifications are required for the instruments used in energy audits? Explain giving examples of the instruments. | 10 |
| | b) Elaborate the need of data energy flow diagram & its significance in view of energy audit. | 10 |