

SE-EE.
sem III (old)
PPE

02/12/2014.

(OLD COURSE)

QP Code :12271

(3 Hours)

[Total Marks : 100

- N.B :** (1) Question no.1 is compulsory.
(2) Attempt any **four** from the remaining questions.
(3) **Figures to right** indicates **full marks**.

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| 1. | (a) Define following terms :— | 5 |
| | (i) Demand factor | |
| | (ii) Load factor | |
| | (iii) Diversity factor | |
| | (iv) Utilization factor | |
| | (v) Plant capacity factor. | |
| | (b) Differentiate between nuclear fission and nuclear fusion. | 5 |
| | (c) Explain in brief, the load curve and load duration curve. | 5 |
| | (d) Explain Base load and peak load plants. | 5 |
| 2. | (a) Explain in brief, the classification of hydro electric power plant. | 10 |
| | (b) Explain the following terms :— | 10 |
| | (i) Hydrograph | |
| | (ii) Run off | |
| | (iii) Rain fall | |
| | (iv) Flow duration curve. | |
| 3. | (a) Explain the ash handling plant in steam power plant. | 10 |
| | (b) What is mean by green house effect? | 10 |
| 4. | (a) Explain the fluidized bed combustion process. | 10 |
| | (b) What are the different types of electrical tariff, explain any four. | 10 |
| 5. | (a) Explain in detail the components of nuclear power plant. | 10 |
| | (b) Explain the pressurized water reactor (PWR) along with the advantages and disadvantages. | 10 |
| 6. | (a) What are the advantages and disadvantages of diesel power plant. Mention the application of diesel power plant. | 10 |
| | (b) Draw and explain the general layout of gas turbine power plant. | 10 |
| 7. | Attempt any two :— | 20 |
| | (a) Acid rain and acid snow | |
| | (b) Geothermal energy | |
| | (c) Solar active and passive collectors. | |