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B.Tech 6th Semester (EE) F-Scheme Examination,

May-2017

ELECTRIC POWER GENERATION

Paper-EE-318-F

Time allowed : 3 hours]

[Maximum marks : 100

Note : (i) Question No.1 (Section-A) is compulsory.

(ii) Attempt four more questions from remaining four section (B, C, D & E) by selecting at least one question from each section.

Section-A

1. (a) What do you mean by Electric Power Generation ? 5
- (b) Explain the term Reserves in Power Generation. 5
- (c) What do you mean by geothermal sources of energy ? 5
- (d) What do you mean by Electric Energy Conservation ? 5

Section-B

2. What do you mean by energy sources ? Discuss the recent trends of Power Generation in India. 20

3. What do you mean by interconnected generation of Power Plants ? Discuss the advantages of interconnected Power Plants. 20

Section-C

4. Explain the terms : 20
- (i) Load forecasting
 - (ii) Load duration curves
 - (iii) Base load Power Plants
 - (iv) Peak load Power Plants
5. Explain the significance of load factor, plant factor and capacity factor in the Power Generation Planning. 20

Section-D

6. Draw and explain the schematic diagram and working of Nuclear Power Plant. 20
7. Explain the construction and working of MHD system. 20

Section-E

8. Differentiate between Energy Management and Energy Audit. Explain the advantages of both in Power System. 20

9. What do you mean by Cogeneration ? Explain the advantages of Energy Efficient Motors for the energy conservation. How it is achieved with the help of energy efficient motors ? 20