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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(EE) (2012 Onwards) (Sem.-4)
B.Tech.(Electrical & Electronics)/(Electronics & Electrical) (2012 Batch)
B.Tech.(Electrical Engineering & Industrial Control) (2012 to 2017)

POWER PLANT ENGINEERING

Subject Code : BTEE-406

M.Code : 57110

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Write briefly :

1. What is Dalton's law of partial pressure?
2. Explain in brief the working of Electrostatic Precipitator.
3. What is the function of air pre heater?
4. What is the function of economizer?
5. What is Governor in hydro plants?
6. Write one advantage of combined operation of different power plants.
7. What is the overall efficiency of steam power plant?
8. What is the difference between two stroke and four stroke Diesel Engine?
9. What is the function of Moderator in Nuclear reactor?
10. What is the function of control rod in nuclear reactor?

SECTION-B

11. How the nuclear energy is generated by fission?
12. Discuss the difference between Pelton and Francis Turbine and type of power plants they are suitable.
13. Explain the operation of Babcock and Wilcox water tube Boiler.
14. Describe Ideal Rankine cycle with suitable graph.
15. Explain the working of open cycle Gas Turbine Power Plant. Write also its Merits and Demerits.

SECTION-C

16. Write in brief about the site selection and the safety measures to be adopted for a Nuclear power plant. What is the difference between fission and fusion reaction, explain with example?
17. Draw a neat diagram of electrostatic precipitator of Thermal power plant. How the flue gases are filtered using different electrodes?
18. Draw a neat layout of diesel power plants, locate any five important parts of the power plant. Explain the working of the five parts of the power plant.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.