

Code No: 09A70302

**R09**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, June/July - 2014**

**POWER PLANT ENGINEERING**

**(Mechanical Engineering)**

**Time: 3 Hours**

**Max. Marks: 75**

**Answer any Five Questions  
All Questions Carry Equal Marks**

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- 1.a) Discuss the requirements of a good ash handling plan.  
b) Describe different types of coal conveyors
- 2.a) What is meant by stoker firing?  
b) Discuss the advantages, disadvantages and classification of stoker firing.
3. Give a general layout of Diesel power plants and describe.
- 4.a) Discuss the advantages of gas turbine power plant over diesel power plant.  
b) Give the classification of gas turbine power plants.
- 5.a) What are the functions of surge tank and fore bay?  
b) What do you understand by water hammer and what are its effects on the power plant?
- 6.a) What are the various factors to be considered in the selection and location of a wind mill.  
b) Discuss the merits and demerits of fuel cell.
- 7.a) Give the functions and materials used for control rods.  
b) What is Boiling Water Reactor? How does it differ from Pressurized Water Reactor?
- 8.a) Explain the capital cost and fixed cost to be considered for cost analysis?  
b) Write a note on "Pollution from atomic power station".

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