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**B.Tech. MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

December, 2012

BIME-017 : POWER PLANT ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note : Answer any five questions.

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1. (a) What are the different types of Fuels ? 7
Explain how coal is formed.
 - (b) Explain about Hydro Electric Power 7
generation with skeleton diagram.
 2. (a) What is meant by Nuclear Energy ? Explain 8
Nuclear Fission and Nuclear Fusion.
 - (b) Classify Power Plants with its location. 6
 3. (a) Describe about Carnot Cycle. 10
 - (b) Write about the essentials of Steam Power 4
Plant.
 4. (a) What is function of a Boiler ? Explain the 8
types of Boilers with emphasis on water tube
Boilers.

- (b) Describe "Superheat Control" by excess air method with suitable sketch. 6
5. (a) Explain LAMONT Boiler with neat diagram. 10
- (b) What is "Mechanical drought" ? Explain. 4
6. (a) What is function of Steam Turbine ? Explain about Impulse steam turbine with neat diagram. 10
- (b) List the advantages and disadvantages of steam turbines. 4
7. Answer *any two* of the following : 7x2=14
- (a) Water cooled Surface Condenser
- (b) Steam Power Station Control
- (c) Nuclear Power Reactor
- (d) Fuel injection System of an IC Engine.
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