

No. of Printed Pages : 03

Roll No.

753

B. Tech. EXAMINATION, Dec. 2017

(Seventh Semester)

(Old Scheme) (Re-appear Only)

(CHE)

CHE-405

ENERGY TECHNOLOGY

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. Make suitable assumption wherever necessary. Assume any missing data.

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P.T.O.

1. (a) With the help of neat diagram describe any *one* wet coal washing process. **10**
 (b) Discuss spontaneous combustion of coal. How can it be avoided ? **10**
2. (a) Discuss the by-product coke oven process for the manufacture of coke and name the by-product recovered. **10**
 (b) Discuss the significance of the various constituents of coal. **10**
3. With the help of neat diagram describe thermal and catalytic reforming. **20**
4. (a) What is catalytic cracking and how is it carried out ? **10**
 (b) Discuss different theories associated with the formation of crude oil under the earth. **10**
5. (a) Discuss the properties and uses of LPG. **10**
 (b) Discuss Orsat apparatus used for the flue gas analysis. **10**

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6. (a) With the help of neat diagram describe the production of Water Gas. **10**
 (b) Discuss the apparatus used for determining the calorific values of gaseous fuels. **10**
7. (a) Discuss the working of blast atomizing burners. **10**
 (b) Discuss the factors affecting the inflammability limits. **10**
8. (a) With the help of neat diagram describe the Gobar gas plant and its main products. **10**
 (b) Discuss the applications of Geothermal energy. **10**

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