

Roll Number:

Thapar University Patiala
Department of Chemical Engineering

BE-CHE (VI Semester) MSE
March 2010

CH-020 Energy Technology

Time: 02 Hours; MM: 24

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Q1.

- a. Explain the term "maturity of coal".
- b. 'All caking coals are not necessarily coking coal but all the coking coals have to be necessarily caking in nature'. Comment.
- c. Why is calorific values of the anthracite coal lower than that of bituminous coal inspite of having a higher carbon content?
- d. What are the beneficial effects of moisture in coal?
- e. What is the principle of coal washing?
- f. What is the differences between LTC and HTC?

[2X6]

Q2. What is acid dew point? What is its significance with respect to efficiency losses?

[4]

Q3. How are the properties of cracked products different from the parent substance? Write about the FCC process.

[4]

Q4. What are the various pretreatment operations done before the crude is sent to a refinery?

[4]