

Petroleum Geology TA/AES3820
Written Examination, June 25, 2010

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NOTE: The questions should be answered *as concisely but correctly as possible* (this is part of the rating). Each numbered question counts equally towards the final score; the four questions in 2 therefore each count 5%. Please mention your name and student number at the top of each sheet.

1. Describe how the organic and inorganic carbon cycles are related to each other.
2. Give short answers to the following questions:
 - a. What are oil seeps and how are they related to migration?
 - b. What characterizes a good source rock?
 - c. What characterizes a good reservoir rock?
 - d. Name two rocks that can form reservoir seals and give their composition
3. Describe the four main groups of hydrocarbons found in petroleum and describe their typical occurrence (in what type of oils, how abundant etc).
4. Name ten non-gasoline products made from petroleum during refining.
5. Make sketches of three common trap types, indicate their oil or gas accumulations and give their names.