



**UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA**

**SECOND SEMESTER EXAMINATIONS, NOV/DEC 2018**

**COURSE NO:** GL 471

**COURSE NAME:** Petroleum Geology

**CLASS:** GL IV

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TIME: 3hrs

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Name: \_\_\_\_\_ Index Number: \_\_\_\_\_

**Attempt all Questions**

1. An important hydrocarbon resource in Ghana and West Africa is the Jubilee Field. Discuss the Jubilee Field under the following: Generation and Maturation of Organic matter, Paleothermometers used, Source Rocks, Type of Migration, Reservoir Rocks, Sedimentary Basin, Traps, Production Methods and Economic Importance.

**(20 marks)**

2. a) Stratigraphic traps are often related to the sedimentary environments. Explain this statement considering sandstone and carbonate reservoirs.

b) Briefly describe the two major genetic groups of traps that have been agreed upon.

**(20 marks)**

3. a) List and briefly explain the natural processes enhance reservoir quality.

b) List and briefly explain the natural processes decrease reservoir quality.

**(10 marks)**

4. a) Differentiate between sedimentary and topographic basins.

b) Explain the terms syndepositional and postdepositional sedimentary basins.

**(10 marks)**

**Dr A. Asante-Annor/ Dr D. Oti**