



UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA

SECOND SEMESTER EXAMINATIONS, MAY 2015

COURSE NO : **PE 170**
COURSE NAME: **PRINC. OF STRAT. AND SED.**
CLASS : **PE I** TIME: **3 HOURS**

Name: _____ Index Number: _____

ATTEMPT ALL QUESTIONS

1. Define the following terms as used in the Petroleum Industry: *(10 marks)*
 - a. Basin
 - b. Reservoir rock
 - c. Trap
 - d. Pool
 - e. Field

- 2a. How does mechanical and chemical weathering influence the formation of sedimentary rocks? Explain each of them and give an example of each type *(6 marks)*
- 2b. Explain why particle size is used as the primary basis for distinguishing among various detrital sedimentary rocks *(4 marks)*

3. Explain the term sedimentary depositional environment. List the three major sedimentary depositional environments and state their importance *(10 marks)*

- 4a. Define the three principles of Steno's law *(5 marks)*
- 4b. Name and explain the two types of dates used by geologists to interpret Earth history *(5 marks)*

5. Name the two basic types of contacts between rock units and explain each of them *(10 marks)*

- 6a. What are sedimentary facies? *(1 mark)*
- 6b. Differentiate between regressive and transgressive sedimentary depositional environment *(4 marks)*
- 6c. State the factors that lead to the formation of both transgressive and regressive sequence *(2 marks)*
- 6d. List the evidence and methods used in the correlation of sedimentary rocks *(3 marks)*

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