



**UNIVERSITY OF MINES AND TECHNOLOGY,  
TARKWA**

FIRST SEMESTER EXAMINATIONS, NOV. – DEC. 2018

**COURSE NO:** GL 377

**COURSE NAME:** ROCKS & MINERAL RESOURCES OF GHANA

**CLASS:** GL III **TIME :** 3 HOURS

[Unihubgh.com](http://Unihubgh.com)

---

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

**SECTION A**

Answer all questions in this section. Each question carries **one (1) mark**

---

1. The most important Paleoproterozoic units in Ghana are  
A). Birimian and Tarkwaian rocks except the intrusives B). Meta-volcanic rocks and metasedimentary rocks C). Granitoids, Meta-volcanic and metasedimentary rocks
2. Which of the gold belts strikes in the north-south direction only?  
A) Ashanti belt B) Bui belt C) Lawra belt D) Sefwi belt
3. Describe rocks types that constitutes the Birimian Supergroup.
4. What basin is found between the Bui belt and the Sefwi belt?
5. Rocks younger than the Paleozoic rocks occur along the coast. True or False.
6. Gold associated with the intrusive in the Birimian have little or no veins. True or False
7. Metasedimentary rocks in the Birimian have 3 stratigraphic units and metavolcanics have 5 sub units. True or False.
8. There are modest bauxite reserves in several areas in southern Ghana? True or False
9. Which reef in the Banket Series is not economical for mining?.....
10. The Cape Coast granitoid is also known as.....
11. Refractory gold is interlock in the .....?
12. Gold in the Birimian are formed from ..... activities.

**(12 marks)**

## Section B

Answer all questions in this section.

---

Q1. Define the following Terms:

I. Refractory gold II. Stockwork III. Lode gold deposit. IV. Contact metamorphism. V.

**(5 marks)**

Q2. Draw the map of Ghana and indicate the major gold belts and basins in the Birimian terrain.

**(10 marks)**

Q3A. Describe how the vein and stockwork gold type in the Birimian was formed.

**(5 marks)**

Q3B. List 5 differences between the Dixcove and the Cape Coast granitoids.

**(5 marks)**

## Section C

**Questions 4 and 5 are optional. Answer only one (either Q4 or Q5)**

---

Q4. Describe the Tarkwaian, considering, its environment of formation, lithology, structures, mineralogy, the various units / stratigraphy of the Tarkwaian and the type of gold mineralisation in the Tarkwaian.

**(20 marks)**

Q5. Draw the Ghana map and in detail indicate the locations of the following mineral deposits.

Gold

Diamond

Manganese

Bauxite

Iron ore

Lithium

**(20 marks)**

**Dr Douglas Oti/Dr G. M. Tetteh**