



UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA

FIRST SEMESTER EXAMINATIONS, NOV./DEC. 2018

COURSE NO: GL 221 Unihubgh.com
COURSE NAME: PERCUSSIVE ROCK DRILLING
CLASS: GD II TIME: 2 HOURS

Name: _____ Index Number: _____

ATTEMPT ALL QUESTIONS (100 marks)

1. Discuss the differences between the two (2) main types of percussive drills. (10 marks)
2. Discuss rotary and percussive drilling. (10 marks)
3. Discuss briefly the two (2) types of percussive drill bits. (10 marks)
4. With the aid of a schematic diagram, discuss the components of a percussive drill rig. (10 marks)
5. With the aid of an appropriate diagram, discuss the components of a down the hole drill. (10 marks)
6. The drilling rate of a percussive drill is mainly a function of ? (10 marks)
7. What is referred to as hammer block in percussion drilling? (10 marks)
8. What is the function of the bit shroud on the down hammer? (10 marks)
9. In percussion drilling, what happens to the hammer when a lot hydraulic fluid is lost during the drilling process? (10 marks)
10. In percussion drilling considering top and down hammers, which one loses more energy during energy transmission onto the bit. Give reason(s) for your answer. (10 marks)

GOOD LUCK!

Sylvester Yezanya/Mr E. M. Buaba