



**UNIVERSITY OF MINES AND TECHNOLOGY,
SECOND SEMESTER EXAMINATIONS, MAY 2018**

COURSE NO: EL 272

COURSE NAME: WORKSHOP TECHNOLOGY AND PRACTICE

CLASS: EL II

TIME: 3 HOURS

Name: _____ Index Number: _____

INSTRUCTION: Answer all Questions

Question 1

(a) Define the following terms:

i. Workshop Technology

ii. Tools

[2 Marks]

(b) Differentiate between a conductor, semiconductor and an insulator and state two applications of each.

[9 Marks]

(c) Draw a well labelled diagram of a shaped conductor power cable and state their respective functions.

[9 Marks]

Question 2

(a) Outline five general cares required in workshop practice.

[5 Marks]

(b) Discuss the difference between electrical shock and electrocution.

[5 Marks]

(c) What should an Electrical Engineer/ technician know prior to using an electrical equipment.

[5 Marks]

(d) Explain the difference between brazing and soldering

[5 Marks]

Question 3

(a) What is a Lathe machine?

[2 Marks]

(b) List two functions of the following machine tools.

i. Milling Machine

ii. Lathe Machine

iii. Shaping Machine

iv. Drilling Machine

[8 Marks]

(c) Fill the gap in the sentences below regarding lathe machine.

- i. Pip is
- ii. The headstock of a lathe machine houses and
- iii. The tailstock of a lathe machine performs, and
- iv. The leadscrew and a cutting tool assist in cutting
- v. The coolant used consists of and
- vii. Facing is.....

[10 Marks]

Examiners: K. B. OWUSU/ J. C. ATTACHIE