



UNIVERSITY OF MINES AND TECHNOLOGY, TARKWA

SECOND SEMESTER EXAMINATIONS, MAY 2019

COURSE NO: EL 272

COURSE NAME: WORKSHOP TECHNOLOGY AND PRACTICE

CLASS: EL 2

TIME: 3 HOURS

Name: _____ Index Number: _____

INSTRUCTION: Answer all Questions

Question 1

- (a) State three classifications of electrical materials with two examples of each. **(6 Mks)**
- (b) State six types of cables and their fields of applications **(6 Mks)**
- (c) With the aid of appropriate diagrams, explain the difference between soldered lug termination and crimped lug termination **(8 Mks)**

Question 2

- (a) What should an Electrical Engineer/ technician do prior to carrying out works with an electrical equipment. **(6 Mks)**
- (b) Discuss the difference between electrical shock and electrocution. **(5 Mks)**
- (c) What three things should one ensure to enable a good soldered joint **(3 Mks)**
- (d) What are the three ways of rectifying a bridged soldered bond on a circuit board? **(6 Mks)**

Question 3

- (a) List two functions of the following machine tools.
i. Milling Machine ii. Lathe Machine iii. Shaping Machine iv. Drilling Machine **(8 Mks)**
- (b) Fill the gap in the sentences below regarding lathe machine.
 - i. Cross slide is for works.
 - ii. Compound slide is for cutting
 - 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.....
- viii. To cut a workpiece of a particular diameter,, and is used.

(12 Mks)

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