



# **JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2012/13 ACADEMIC YEAR**

**1<sup>ST</sup> YEAR 1<sup>ST</sup> SEMESTER EXAMINATION FOR THE DIPLOMA IN  
BUILDING AND CIVIL ENGINEERING**

**COURSE CODE: TBC- 2217**

**COURSE TITLE: WORKSHOP TECHNOLOGY III**

**DATE: 21/4/2013 11.00-13.00PM**

**DURATION: 2 HOURS**

## **INSTRUCTIONS**

1. This paper consists of 5 questions
2. Answer question ONE and any other two questions
3. Answer on the answer booklets provided

### QUESTION ONE

- a) Name three ways in which you can be exposed to hazardous substances in a workshop  
(3marks)
- b) Give three dress rules that you should always follow while in a workshop  
(3marks)
- c) Name three hazards that are likely to arise when carrying out welding or flame cutting  
(3marks)
- d) In the plan of the 16<sup>th</sup> editions of the IEE regulations, the regulations are in seven parts.  
Give the seven parts  
(7 marks)

### QUESTION TWO

- a) Fire is a great danger in a workshop and care must be taken not to start a fire. Give the three main causes of fire in a workshop  
(3marks)
- b) Name the five types of fire extinguishers  
(5marks)

### QUESTION THREE

- a) Give the colour coding for wiring of a building for the phase power supply  
(5marks)
- b) What are the three components used for electrical installation in a premise  
(3marks)

### QUESTION FOUR

- a) What are the two main types of earthing systems  
(2marks)
- b) Name three tool used for marking out in a mechanical workshop  
(3marks)
- c) Give three tools used for cutting metal in a mechanical workshop  
(3marks)

### QUESTION FIVE

- a) In plant maintenance the assets to be maintained involve more than one valued component. Name the typical assets  
( 3 marks)
- b) The maintenance procedures to be followed are not fully defined and must be modified. Give five typical procedures to be carried out during the maintenance  
(5marks)