



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

THIRD YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF TECHNOLOGY
IN
BUILDING AND CONSTRUCTION**

COURSE CODE: BTB 362

**COURSE TITLE: OCCUPATIONAL SAFETY AND
HEALTH**

DATE: TUESDAY 3RD NOVEMBER 2020 TIME: 9.00 – 11.00 AM

INSTRUCTIONS:

1. This paper contains FIVE Questions
2. Answer FOUR Questions only
3. Marks for each question are indicated in the parenthesis.
4. It is in the best interest of the student to write legibly
5. Examination duration is **2 Hours**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over.

QUESTION ONE

- a) Differentiate between the following terms giving examples for each case
[4 marks]
- i) Hazard and Risk ii) Safety and Health
- b) Outline the salient features of a construction site which makes it a concern for occupational safety and health officer
[4 marks]
- c) Outline the main objectives of safety management
[6 marks]
- d) Explain the metrics for accident measurement in a construction site
(6 marks]

QUESTION TWO

- a) You have been appointed as an occupational safety and health manager in the contractor's office, explain how you would ensure safety in the construction site
[8 marks]
- b) XYZ insurance company declined to pay ABC construction company as a compensation of two workers who sustained serious injuries during excavation of foundation works of a Highrise building. Outline the possible reasons which may have prompted the site assessment team from the insurance company to decline payment of the compensation
[6 marks]
- c) Outline the circumstances of using suspended scaffolds and likely causes of accidents arising from their use
[6 marks]

QUESTION THREE

- a) Outline the limitation of using ladders as a safety precaution measure in a building construction site
[4 marks]
- b) Explain the types of accidents which occur in a roof work
[6 marks]
- c) Explain how training helps in preventing accidents in a construction site
[5 marks]
- d) Outline the site conditions which make it unsafe to use a crane [5 marks]

QUESTION FOUR

- a) Describe the steps that can be taken in a construction site to prevent accidents in material handling [6 marks]
- b) What are the risks associated with power-driven machinery? What would you do to minimize these risks? [8 marks]
- c) How have various machines changed work methods in the construction industry in the past few years? [6 marks]

QUESTION FIVE

- a) Describe the ergonomic hazards in a construction site [6 marks]
- b) Explain the precautions that should be followed when using flammable chemicals in a construction site [6 marks]
- c) Describe the following hazardous substances in the construction industry [8 marks]
 - i) Cement ii) Asbestos

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