

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF THE BUILT ENVIRONMENT

DEPARTMENT OF QUANTITY SURVEYING

BACHELOR OF QUANTITY SURVEYING (HONORS) DEGREE

PART 1 FIRST SEMESTER EXAMINATIONS – JANUARY 2008

INTRODUCTION TO CONSTRUCTION LEGISLATION – AQS 1105

TIME: 3 Hours

TOTAL MARKS: 100

INSTRUCTIONS

**Answer Four (4) Questions Only.
All Questions Carry Equal Marks.**

QUESTION 1

- a) Describe and explain the causes of fire outbreaks and spread on construction sites and buildings? *(12Marks)*
- b) With the aid of illustrations where necessary discuss the various strategies that can be implemented to prevent fires as well as reduce excessive damage by fires. *(13 Marks)*

QUESTION 2

- a) With the aid of examples describe and explain the different types of hazards associated with frame erection? *(10 Marks)*
- b) What are the most important considerations when erecting a frame at both the design and erection stages? *(15 Marks)*

QUESTION 3

- a) Discuss the major causes of fatalities to construction workers at a site. *(6 Marks)*
- b) Discuss the following, giving concrete examples where necessary

- (i) The strategies for preventing slips
- (ii) Noise and Vibration hazards
- (iii) Domino theory of accident causation
- (iv) Multiple cause theory

(16 Marks)

- c) An accident has happened on your construction site. How would you investigate the case and analyse the cost of the accident?

(3 Marks)

QUESTION 4

Chapter 12 of the Model Building By – Laws outlines the general safety precautions for public protection. With the aid of illustrations, describe and explain all the precautions highlighting the important aspects?

(25 Marks)

QUESTION 5

“It is not only the duty of the site manager or supervisor but everyone’s responsibility to ensure Health and Safety on construction sites”.

- a) Discuss the above statement paying attention to the following,

- i) Legal Requirements
- ii) Company Policy
- iii) Site Rules
- iv) Professional Ethics
- v) Your Own Actions

(20 Marks)

- b) With the aid of examples, describe and explain the Health and Safety situation on construction sites in Zimbabwe?

(5 Marks)

QUESTION 6

- a) With the aid of illustrations where necessary, define the following terms,
- (i) Division walls and division floor
 - (ii) Partition wall
 - (iii) Guard rail
 - (iv) External wall
 - (v) Party wall
 - (iv) High fire load
 - (v) Load bearing wall
 - (vi) Occupancy separation structures **(16 Marks)**
- b) A ladder is a dangerous means of access to a work place. Discuss? **(4 Marks)**
- c) You have observed a colleague working on a flat roof without parapets. Discuss the hazardous condition and the related unsafe behaviour? **(5 Marks)**

END OF EXAMINATION