

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**FACULTY OF BUILT ENVIRONMENT**

**BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE**

**PART I FIRST SEMESTER EXAMINATIONS APRIL 2009**

**INTRODUCTION TO CONSTRUCTION LEGISLATION AQS1105**

**TIME:** 3 Hours

**TOTAL MARKS:** 100

**Instructions**

*Answer Four (4) questions only. All question carry equal marks.*

**Question 1**

“Safety in the context of civil engineering is the discipline of preserving the health of those who build, operate, maintain and demolish engineering works and others affected by those works.”  
(Davies and Tomasin, 1990)

- i) Assess the validity of this statement. (20 marks)
- ii) Describe how safety can be improved during demolition work. (5 marks)

**Question 2**

- a) Discuss the possible causes of fire outbreaks during construction period and post construction / on completed buildings. (15 marks)
- b) Identify and illustrate strategies that can be put in place to prevent and extinguish fires in the Built Environment. (10 marks)

**Question 3**

- a) Define the procedures to be followed during formwork construction in order to avoid accidents on site. (13 marks)
- b) What advice should be given to construction site workers to mitigate site disasters? (12 marks)

**Question 4**

- a) With aid of examples differentiate between each of the two terms in construction.
- i)* Hazards and disasters. (5 marks)
  - ii)* Risk and vulnerability (5 marks)
  - iii)* Division and partition walls (5 marks)
- b) How best can construction site hazards and disasters be managed? (10 marks)

**Question 5**

- a) Discuss different forms of occupancy units and their respective grades of construction that make building hazards free. (14 marks)
- b) How best could the assessment of building height of be done in accordance with the Model Building By-laws of Zimbabwe. (11 marks)

**Question 6**

- a) The construction of chalets (thatch) houses is proving to be popular in Zimbabwe and elsewhere in Sub-Saharan Africa.
- i)* What advice can you give to the Project Manager on the provision of services to such buildings. (15 marks)
  - ii)* Discuss the possible hazards and fatalities that might arise during and after the construction of such structures. (10 marks)

**END OF EXAMINATION**