

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

APPLIED PHYSICS DEPARTMENT

SRA 1214 - HEALTH AND SAFETY AT WORK AND WELFARE SERVICES

BSc HONOURS PART I: MAY 2005

DURATION: 3 HOURS

ANSWER **ALL** PARTS OF QUESTION **ONE** IN SECTION A AND ANY **THREE** QUESTIONS FROM SECTION B. SECTION A CARRIES 40 MARKS AND SECTION B CARRIES 60 MARKS.

SECTION A

1. (a) Outline the disadvantages of centralisation. [5]
- (b) State the benefits of decentralisation. [5]
- (c) Explain the structures of a central hospital. [5]
- (d) State the advantages of autonomy in professional councils. [5]
- (e) Outline how needy individuals are identified in Zimbabwe and the type of assistance that is offered. [5]
- (f) Explain internal and external factors that affect safety in the hospital environment. [5]
- (g) State the indicators that measure the health status of a community. [5]
- (h) (i) Explain the purpose of local rules in an imaging/radiotherapy department. [2]
- (ii) Outline the law that governs the use of ionising radiation in Zimbabwe. [3]

SECTION B

2. (a) Describe the disease transmission cycle. [10]
- (b) Explain how health workers can break cycle to prevent infection. [10]
3. Write notes on two of the following:
 - (a) Accident prevention. [10]
 - (b) Principles of disaster management. [10]

- (c) Hazard identification in the workplace [10]
4. (a) State five occupational diseases and explain how they can be prevented. [10]
(b) Explain the procedure from moving a paraplegic patient from a wheel chair to an X-ray couch. [10]
5. (a) Describe strategies devised for improvement of quality of care in the Ministry of Health and Child Welfare. [10]
(b) State the ten goals derived from the key challenges in the situation analysis. [10]
6. Explain the design features of an imaging and / or radiotherapy department that enhances the safety of staff, patients and general public. [20]

- END OF EXAMINATION -