

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF APPLIED SCIENCES
MASTER OF SCIENCE IN SPORT SCIENCE AND COACHING
DEPARTMENT OF APPLIED BIOLOGY AND BIOCHEMISTRY
SUPPLEMENTARY EXAMINATION : PHYSIOLOGY SSC.5102

FEBRUARY 2002

3 HOURS (100 marks)

INSTRUCTIONS

Answer FOUR Questions. Each question carries 25 marks. Where a question contains subdivisions, the mark value for each subdivision is given in brackets.

1. Write an essay on gastric motility and digestion of carbohydrates and proteins.
2. Describe the process of muscular contraction at tissue and molecular level.
3. Explain how the heart performs its function as a blood pump.
4. Discuss the mechanism of gas exchange in man.
5. Give a brief outline on the following:
 - a) Insulin (8 marks)
 - b) Epinephrine (9 marks)
 - c) Antidiuretic hormone (8 marks)