

# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC4214

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

## **THEORY: SSC4214: SPORTS SPECIALITY MODULE - TENNIS**

MAY 2011

3 HOURS (100 MARKS)

### **INSTRUCTIONS**

Answer 4 questions only. Each question carries 25 marks. Where a question contains subdivisions, the mark value for each subdivision is given in brackets. Illustrate your answer where appropriate with large clearly labeled diagrams.

1. a) Outline the mechanics of a slice serve and its difference from a flat serve. [10 marks]
- b) What are the tactical uses of a slice serve? [15 marks]
2. a) Ball control is an important skill in playing tennis. Explain why? [10 marks]
- b) i) What determines the distance, spin and speed of a ball in tennis? [7 marks]
- ii) How can you develop these aspects in tennis? [8 marks]
3. Outline the elements of the following strokes:-
  - i) The Lob . [12 marks]
  - ii) The Smash. [13 marks]
4. Outline how the following can be used to improve speed for a tennis player:-
  - i) Egg timer speed drill. [5 marks]
  - ii) Spider drill. [5 marks]
  - iii) Hexagon drill. [5 marks]
  - iv) Killer line sprint. [5 marks]
  - v) Roll and catch. [5 marks]
5. Using Sir Isaac Newton's Laws of motion, explain how control and force are gained by a tennis player. [25 marks]
6. Explain how the transfer of angular momentum can be a factor to make an Open-stance ground stroke effective. [25 marks]

**END OF EXAMINATION**