

# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC1104

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

**THEORY: SSC1104: FUNDAMENTALS OF ATHLETICS**

FEBRUARY 2010

3 HOURS (100 MARKS)

## **INSTRUCTIONS**

Answer **four** 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) Each running stride can be divided into a support phase and a flight phase.  
Describe the characteristics of the :
  - (i) Support phase (8 marks)
  - (ii) Flight phase (8 marks)
- b) Suggest drills to improve both the support and flight phases (9marks)
2. The crouch start is divided into four major phases.
  - a) Identify the phases. (4 marks)
  - b) Suggest and account for activities to improve performance for each of the four phases (21 marks)
3. Middle and long distance runners must develop general endurance as well as endurance which is specific to the energy demands of their event. Discuss this statement with reference to a 1500m and marathon runner. (25 marks)
4. a) Compare and contrast the upsweep and down sweep methods of relay button exchange (4 marks)
- b) Give an account of the progressions you would use to teach non visual relay button exchange to a group of 8 beginners. (21 marks)
5. a) Write short notes on skills and conditioning exercises for jumps under the following subheadings for jumps:
  - (i) Determinants of distance and height of flight (5 marks)
  - (ii) Characteristics of an effective take off (5 marks)
  - (iii) Specific running drills (5 marks)
  - (iv) Hopping (5marks)
  - (v) Hurdle jumps (5 marks)

6. a) Describe the drills that you would use to help a beginning athlete master the shot put. (10 marks)
- b) Discuss the importance of Track and Field athletics to society. (15 marks)

**END OF EXAMINATION**