

# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC4112

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

## **THEORY: SSC4112: SPORTS SPECIALITY MODULE – ATHLETICS (TRACK AND FIELD –MIDDLE AND LONG DISTANCE, RACE WALKING AND STEEPLE CHASE)**

JANUARY 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) Identify the sub-components of the following biomotor abilities and discuss their importance in long distance running performance.
  - i. Speed [3 marks]
  - ii. Strength [4 marks]
  - iii. Endurance [6 marks]
  - iv. Flexibility [4 marks]
- (b) Identify four (4) mobility exercises for a long jumper explaining how they are done. [8 marks]
- 2) With the use of examples write a training content for each of the following phases:-
  - (a) The preparation period [10 marks]
  - (b) The competition period [10 marks]
  - (c) The transition period [5 marks]
- 3) Design a test battery a coach can use to;
  - (a) Assess the progress of his/her long distance athletes. [20 marks]
  - (b) Predict the performance of middle distances athletes. [5 marks]
- 4) The following are steps in the teaching progressions of the steeple chase: hurdle technique, water jump technique, water jump whole sequence, hit the spot, hurdling over obstacles in a marked course, step technique I and II.
  - (a) Arrange them in recommended order. [7 marks]
  - (b) Identify the objective for each of the given steps and explain how you would teach/coach an athlete to achieve that objective. [18 marks]

- 5) Design a technique analysis instrument to use for checking the correct technique for all the phases in the race walking event. [25 marks]
- 6) Critically evaluate the demand profile in an event of your choice, under the subheadings
- (a) Endurance [5 marks]
  - (b) Speed [5 marks]
  - (c) Strength [5 marks]
  - (d) Flexibility and coordination [5 marks]
  - (e) Technique and tactics [5 marks]

**END OF EXAMINATION**