

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC2112

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

THEORY: SSC2112: SPORTS SPECIALITY MODULE – ATHLETICS (TRACK AND FIELD – JUMPS)

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) Identify the biomechanical demands and the consequences for training for each of the following phases in the long jump:-
 - (a) Approach. [8 marks]
 - (b) Take off. [6 marks]
 - (c) Flight. [7 marks]
 - (d) Landing. [4 marks]

- 2) The following are steps in the teaching progressions of the triple jump: rhythmic jumps, triple jump grid triple jump with step to platform, multiple triple jump, and triple from a medium approach.
 - (a) Arrange them in recommended order. [5 marks]
 - (b) Identify the objective for each of the given steps and explain how you would teach/coach an athlete to achieve that objective. [20 marks]

- 3) Design a test battery which a coach can use regularly to assess the progression of his/her high jump athlete. [25 marks]

- 4) (a) Identify the sub-components of the following biomotor abilities and discuss their importance in jumping 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 and the effects they produce. [8 marks]

- 5) Design a technique analysis instrument to use for checking the correct technique for all the phases in the high jump event. [25 marks]
- 6) (a) Design a pole vault training plan for a five-day microcycle in the preparation period. [10 marks]
- c) For a chosen day on that microcycle plan, draw a detailed training plan for a two-hour session. [15 marks]

END OF EXAMINATION