

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC2212

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

THEORY: SSC2212: SPORTS SPECIALITY MODULE (TRACK & FIELD ATHLETICS - JUMPS)

DECEMBER 2004

3 HOURS (100 MARKS)

INSTRUCTIONS

Answer any 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. How would you train a long jumper to develop the following:-
 - a) Approach (8 marks)
 - b) The approach/take off complex (11 marks)
 - c) Flight and landing (6 marks)

2. a) Describe the following flight techniques.
 - (i) The hang (4 marks)
 - (ii) The hitch-kick (4 marks)
 - b) In what way are the two similar in their functions? (2 marks)
 - c) (i) Why are mobility exercises important for jumpers? (3 marks)
(ii) Describe six exercises for mobility development of a triple jumper and identify the muscles affected by each of the exercises. (12 marks)

3. a) Speed and strength are biomotor abilities which affect performance in the jumping events. Each of the two has subcomponents. Give an exposition of the training goals of each of the subcomponents. (14 marks)

b) State the ranges of angles of takeoff for both the long jump and the triple jump (hop and step). (2 marks)

c) What causes the following faults in triple jump and how can they be corrected?
 - (i) Hop too high (3 marks)
 - (ii) Short step (3 marks)
 - (iii) Deceleration from phase to phase (3 marks)

4. a) Describe how each of the three below should be executed in an efficient high jump takeoff.
- (i) Touch down (3 marks)
 - (ii) Amortization (3 marks)
 - (iii) Takeoff (3 marks)
- b) Give a detailed exposition of five exercises for technique development of the approach in high jump. (11 marks)
- c) Prescribe gymnastic exercises for a flop high jumper to improve bar clearance mobility. (5 marks)
5. a) Design a high jump training plan for a 7 day Microcycle. (10 marks)
- b) For a particular day on that microcycle plan, draw a detailed plan for a 2 hour training session. (15 marks)
6. Write short notes on the technical characteristics of the following phases of the pole vault.
- (i) Approach and Plant (5 marks)
 - (ii) Takeoff and Penetration (5 marks)
 - (iii) Rock back and Stretch/Turn (5 marks)
 - (iv) Bar Clearance and Landing (5 marks)

END OF EXAMINATION QUESTION PAPER