

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC1212

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

THEORY: SSC1212: SPORTS SPECIALITY MODULE (TRACK AND FIELD ATHLETICS I)

JUNE 2004

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) Discuss the anatomical and physiological points of view that you would consider in selecting middle and long distance athletes. [7 marks]
- (b) Explain the basic tactics which middle and long distance runners should apply during races? [5 marks]
- (c) Basic endurance, discipline specific endurance and speed endurance constitute part of the demand profile for middle and long distance running. Discuss the goal for each and the accompanying training contents and methods? [13 marks]
2. (a) Give an exposition of the anatomical and bioenergetic characteristics of sprints. [6 marks]
- (b) Compare and contrast the technical characteristics of long distance and sprint running. [19 marks]
3. (a) Outline the phase structure of the hurdling technique and the characteristic features of each phase. [19 marks]
- (b) What are the goals of training for mobility and coordination in hurdles? [6 marks]
4. (a) Design an instrument to analyze the technique of all the phases of the long jump. [13 marks]
- (b) The following constitute the demand profile for strength in long jump:
 - (i) Maximum strength
 - (ii) Speed strength
 - (iii) Reactive strength
 - (iv) General body strengthIdentify the training goal for each as well as the content and methods which are suitable for meeting your training goals. [12 marks]

5. (a) Design an instrument to analyze the technique of all the phases of the linear technique in shot-put. [12 marks]
- (b) Identify the mental skills required for shot-put, hammer, discus and javelin throws and suggest how a coach can develop them in an athlete. [13 marks]
6. (a) Compare and contrast the strength demand profile between the shot-put and javelin throw [8 marks]
- (b) Outline a teaching progression that a coach can use to introduce the javelin throw to a post-pubescent athlete. [17 marks]

END OF EXAM QUESTION PAPER