

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 AND FIELD ATHLETICS

- THROWS)

MAY 2005

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. a) What do you understand by the terms general exercises, special exercises and specific exercises? [6 marks]
b) Describe a set of exercises that you can prescribe for specific strength for a javelin thrower. [13 marks]
c) How can a coach develop speed for a discus thrower? [6 marks]
2. a) Give a detailed exposition of the tests which can be used to monitor a discus thrower's fitness over an annual training period? [16 marks]
b) The medicine ball can be quite handy in developing a discus thrower's general strength. Discuss some of the exercises that an athlete can do with the medicine ball. [9 marks]
3. a) Discuss research findings on the effects of the height of release, angle of release and velocity of release on the distance traveled by the javelin. [16 marks]
b) Outline the characteristics of the five stride rhythm in the javelin. [6 marks]
c) The following factors relate to performance in the shotput linear technique, arrange them in their order of significance.
Angle of release X_0
Velocity of release V_0
Height of release L_0
[3 marks]
4. a) Outline the characteristic features of the phases of the shotput linear technique. (15 marks)
b) Identify the three components of strength important in the shotput and discuss the training goal, training contents and the training methods for the three. [10 marks]

5. a) Give details of the specifications of the implements used by women (Youth/Junior/Senior) and men (Youth/Junior/Senior) for the shot, discus, hammer and javelin. [16 marks]
- b) Make a schematic representation of the layout of the shot, discus and hammer circles. [9 marks]
6. a) Explain familiarization exercises which a coach can use during the development of the hammer throw technique. [6 marks]
- b) With reference to javelin, discuss the muscle groups which contribute to;
- (i) the beginning of the javelin throw, [5 marks]
 - (ii) the final phase of the javelin throw, and [6 marks]
 - (iii) "resistance" to contact with the ground in the last stride of the left leg. [3 marks]
- c) In what way is the shotput rotational technique advantageous over the linear technique? [5 marks]

END OF EXAMINATION QUESTION PAPER