

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 - ATHLETICS

MAY 2012

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) The four (4) throwing events have common features, name and describe fully each of the phases in throws, using an event of choice as an example. [10 marks]
- (b) Considering that all throws were developed from weapons of war use a diagram to critically discuss the safety precautions during the teaching of throws. [15 marks]
2. Identify, describe and justify your choice of test and control methods for an athlete who specialises in the throwing events. [25 marks]
3. All throwing events follow the phases; preparation, momentum gathering, power position release and follow through. Using examples from any two events show similarities and differences in the phases. [25 marks]
4. Clearly describe the officiating processes from the call room through to the medals ceremony in throwing events. Use a group of 25 athletes to clearly show how you would manage the qualifying rounds up to the finals. [25 marks]
5. (a) Explain what happens at the power position in the discus event. [8 marks]
- (b) Which specific muscles and joints are involved during the movement out of the power position? [9 marks]
- (c) State and explain general and specific training activities to develop the muscles. [8 marks]

6. (a) Use diagrams and/or equations to show how the release angle, release speed, and release height affect the path of a projectile. [10 marks]
- (b) Ideally the optimum angle of release should be 45° , but research has shown that in the world shot put champions release angles range between 33° and 42° . Identify the causes of this variation and explain how they contribute to this. [15 marks]

END OF EXAMINATION