

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC2216

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

THEORY: SSC2216 TESTING AND MEASUREMENT IN SPORTS

MAY 2011

3 HOURS (100 MARKS)

INSTRUCTIONS

Answer **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. With relevant examples, explain the following terms as with reference to testing and measurement in sports:

- a) Measurement. [5 marks]
- b) Evaluation. [5 marks]
- c) Test reliability. [5 marks]
- d) Test Objectivity. [5 marks]
- e) Test Validity. [5 marks]

2. The Department of Sports decided to test the incoming special entry students and collected the following data;

Subject Number	Sport	Height-(m)	Body Mass-(kg)	Vertical Jump(cm)
1	Gymnastics	1,63	52,95	56
2	Rugby	1,77	106	45
3	Basketball	1,89	86	57
4	High Jump	1,73	68	71

- a. Calculate and rank the power of these students. [5 marks]
- b. For each of the athletes, calculate another ratio that can be drawn from the above data. [3 marks]
- c. Make general comments that could explain the results obtained in questions 5a and b. [10 marks]
- d. Relate a test that could be used to measure anaerobic power. [7 marks]

3. a) Briefly explain how you would determine the heart rate reserve as well as its value to your athletes. [10 marks]
- b) With examples from one of your sports modules, explain the concept of a test battery and the order of tests that constitute it. [5 marks]
- c) Propose a test that could be used by Zimbabwean physical education teachers to measure agility among their students. [10 marks]
4. a) List five factors that affect flexibility. [5 marks]
- b) Relate a test you would use to measure muscular endurance of the upper limbs. [10 marks]
- c) Briefly explain why it takes longer to develop the muscles of the lower limbs. [5 marks]
- d) Propose 2 exercises that could be used to develop the trunk muscles. *Note: - All exercises should be adequately graded.* [5 marks]
3. Your local community has requested you to organize a one (1) day seminar to raise awareness on the value of testing and measurement in Sport.
- a) Draw up and justify the guest list of your targeted audience [10 marks]
- b) Draft a five minute speech for the key-note address [5 marks]
- c) Propose a programme that would facilitate the presentation of relevant testing a measurement talks and the inter-exchange of ideas between the presenters and the audience. [10 marks]
6. Zimbabwe's soccer coaches, although passing the theory of coaching examinations, tend to underperform at their Physical Fitness tests especially the VO₂ Max.
- a) Briefly explain how you could develop the VO₂ Max among your aspiring coaches in preparation for the 2010 FIFA World Cup. [5 marks]
- b) Relate 2 tests (*One indoor and the other outdoor*) that you could use to assess the VO₂ Max of soccer referees. [20 marks]

END OF EXAMINATION