

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

AUGUST 2009

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 examples, explain the following terms as they refer to testing and measurement.
 - a) testing (5 Marks)
 - b) measurement (5 Marks)
 - c) reliability (5 Marks)
 - d) validity (5 Marks)
 - e) objectivity (5 Marks)

2. You have the task of organizing a 1 day workshop to raise awareness on the value of testing and measurement in one of your sporting codes.
 - a) Who would you invite for this event and why? (5 Marks)
 - b) Draw up a programme for the workshop (10 Marks)
 - c) What would be the content of your 5 minute key note address? (10 Marks)

3.
 - a) Justify strength as an essential physical quality in sporting activity (5 Marks)
 - b) Relate a test you would use to measure muscular endurance in the arms. (10 Marks)
 - c) Explain a test you would use to measure flexibility of the lower back and the hamstring muscles. (10 Marks)

4. Your new team of soccer players presents signs of exhaustion and fatigue by the time they get to the end of the first half. They gasp for air and breathe heavily as they try to explain their experiences of the game.
 - a) Identify the physical fitness component that is lacking in this team. (1 Marks)
 - b) What is the VO_2 max of an individual? (4 Marks)
 - c) Relate any 2 testing protocols (*one for the field and one for the gym*), that can be used to measure VO_2 max. (20 Marks)

5.
 - a) Describe a test you would use to measure and calculate power in your team of beach volleyball players. (10 Marks)

- b) From the data below, calculate and rank the power of the following members of a beach volley team.

Name	height (m)	weight (kg)	vertical jump (cm)
Rivaldo lula da silva	1,89	85	65
Ronaldinho Fernandez	1,94	98	60
Ronaldo Kanana Redes	1,98	77	67

(5 Marks)

- c) Propose five plyometric exercises that can be used to improve power.

(10 Marks)

6. a) Briefly explain any five considerations you would make when conducting testing and measurement in athletes. (10 Marks)

- b) Compose a test battery that can be used to assess the general physical fitness of physical education pupils Zimbabwe's primary schools and briefly justify the order of realization of your selected tests. (15Marks)

END OF EXAMINATION