



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SSS 301: APPLIED EXERCISE PHYSIOLOGY

DATE: Wednesday 23rd December, 2009

TIME: 2.00 p.m – 4.00 p.m

INSTRUCTIONS

*Answer any **THREE** questions. Answer each Question in a Separate booklet*

- 1a) Analyze the protocol you would use to assess the flexibility of an individual who usually has difficulty when standing up with the back straight sitting. [23½ marks]
- b) What intervention would you prescribe? [8 marks]

2. You are responsible for determining Mr. Kioko's body composition. He is sedentary and appears to enjoy consuming his number of daily calories. Recently, he has had some concerns about his body weight, particularly his percent body fat. Using the skinfold caliper, determine how you would establish Mr. Kioko's percent body fat. [23½ marks]

3. You have been requested to determine the general muscular strength and endurance for Alice who is a client at the University' Health and Recreation Centre. Alice is somewhat overweight and she is concerned about her general lack of handgrip strength. Describe how you would determine Alice's grip strength. Outline some exercises that Alice can use to develop muscles of the arm and shoulder region. [23½ marks]

4. You have been approached by Mr. Odhiambo concerning his maximum oxygen uptake. Mr. Odhiambo is 57 years and his body weight is 90 kg, and he is 5'10 tall. He is sedentary and has been for most of his life. He is not on any medication, and he has no known heart disease. Just recently, however, he has noticed some difficulty in breathing and recovers slowly after an occasional game of soccer. What specific exercises would you prescribe for Mr. Odhiambo? Describe the protocol you would use to assess the major components of exercise training for him. [23½ marks]
5. Analyse the benefits of warm-up and cool down during exercise. [23½ marks]