UNIVERSITY OF JOHANNESBURG

NOVEMBER EXAMINATION

PROGRAM   **: BA HONS (BIOKINETICS)**

SUBJECT   **: CLINICAL EXERCISE SCIENCE**

CODE   **: HMS 8X01**

DATE   **: 28 NOVEMBER 2016**

DURATION   **: THREE (3) HOURS**

TOTAL MARKS   **: 150 MARKS**

EXAMINERS   **: MRS S. FERREIRA & PROF L. LATEGAN**

MODERATOR   **: PROF. L. LATEGAN**

NUMBER OF PAGES   **: TWO (2) PAGES**

INSTRUCTIONS TO CANDIDATES:

MAKE SURE THAT YOU HAVE THE COMPLETER PAPER.

ANSWER ALL THE QUESTIONS.

QUESTION 1 (10 MARKS)

Explain the hierarchy of evidence that exist in "evidence-based practice" and discuss how you will use this in making clinical decisions in your practice.

QUESTION 2 (50 MARKS)

A 23-year-old male soccer player broke his right tibia during a tackle in a soccer match. He also cracked his fibula of the right leg. He went for an operation eight (8) months earlier, where they inserted a steel rod and screws around the ankle and knee joint. He has been seeing the physiotherapist shortly after the operation, where he received pain treatment and massages. Currently he is not experiencing too much pain, except for the screws that are causing pain on impact activities, such as jumping. Discuss the entire rehabilitation process to be followed, including assessment, aims, treatment, exercise program for initial phase and a progression program. Also describe the different principles of rehabilitation for athletes.

QUESTION 3 (20 MARKS)

Explain the therapeutic effects that aerobic exercise can have on a patient diagnosed with Coronary Artery Disease (CAD).

QUESTION 4 (20 MARKS)

Discuss the purpose and procedure of exercise testing in patients with chronic obstructive pulmonary disease in detail.

QUESTION 5 (15 MARKS)

Write a short essay on the term 'neuroplasticity', the principles that applies to it and explain how exercise can impact on it.

QUESTION 6 (25 MARKS)

Compare or differentiate the effects of pharmacotherapy versus exercise on metabolic syndrome.

QUESTION 7 (10 MARKS)

Discuss the term 'chronicity' in elderly and how exercise can be used as therapy in the management thereof.

TOTAL: 150