

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

SSC4207

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF SPORTS SCIENCE AND COACHING

THEORY: SSC4207: HEALTH, EXERCISE AND SPORTS RECREATION

MAY 2011

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) Discuss the concept of physical fitness. [15 marks]
b) Using the cycle of Physical Activity Benefits, explain the benefits of physical activity. [10 marks]
2. a) Outline the three hypokinetic conditions and how physical activity can reduce the risk of getting these conditions. [15 marks]
b) Outline the following hyperkinetic conditions and how physical activity is related to them:-
 - i) Activity neurosis [5 marks]
 - ii) Body image disorders. [5 marks]
3. a) Outline the health benefits of muscle fitness. [10 marks]
b) Explain the components of a training routine you can employ to build strength and muscular endurance. [15 marks]
4. a)
 - i) Explain how energy balance affects obesity. [9 marks]
 - ii) Describe the three different types of obesity. [9 marks]
b) Explain why our metabolic rates change as we age. [7 marks]
5. Outline the physical activity guidelines for pregnant women. [25 marks]
6. a) Outline how physical activity can reduce anxiety. [10 marks]
b) Explain how physical activity improves mental health through the following biological adaptations:-
 - i) Autonomic nervous system. [8 marks]
 - ii) Hypothalamic-pituitary-adrenal cortex system. [7 marks]

END OF EXAMINATION