



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2008/2009

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (SPORTS SCIENCE)

SSS 104: HUMAN PHYSIOLOGY 1

DATE: Thursday 2nd April, 2009

TIME: 2.00 p.m. – 4.00 p.m.

INSTRUCTIONS

Answer any THREE (3) questions. Answer each question on a separate booklet.

1. (a) Draw the molecular structure of alpha-linoleic acid and explain the significance of the occurrence of its first double bond in the functioning of the human body. [8 marks]
- (b) Trace the fate of monosacharrides after absorption by small intestines. [15½ marks]
2. (a) Expound on diffusion of gases across tissues. [10 marks]
- (b) Explain the effects of the following entities on oxyhemoglobin dissociation curve
- i. PH [7 marks]
- ii. Temperature [6½ marks]
3. (a) Explain the formation of intercellular fluid. [15 marks]
- (b) Use blood glucose to expound on any four principles of homeostatis. [8½ marks]
4. (a) Distinguish between NAD and FAD. [4 marks]
- (b) Contrast between anaerobic glycolysis and oxidative formation of ATP. [19½ marks]
5. (a) Analyse the role of the muscles. [8 marks]
- (b) Describe the process of muscular contraction. [15 marks]

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