



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2010/2011
INSTITUTE OF OPEN LEARNING (IOL)
EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION
SLR 202: HUMAN PHYSIOLOGY

DATE: Thursday, 3rd February, 2011

TIME: 8.00 a.m. – 10.00 a.m.

INSTRUCTIONS: Answer any **THREE** questions.

- Q.1 Explain the following conditions and their control in an athlete's body:
- a) Diuresis (11 marks)
 - b) Diabetes Mellitus (12.3 marks)
- Q.2 Expond on the formation of glomerular filtrate in the human kidneys and the factors necessary for ultra-filtration to take place. (23.3 marks)
- Q.3
- a) Explain oxygen dissociation curve of the human hemoglobin and show its significance in physical activity. (9.3 marks)
 - b) Differentiate between:
 - i) white and red muscle fibres (5 marks)
 - ii) pulmonary veins and pulmonary arteries (3 marks)
 - iii) bicuspid and tricuspid valves in terms of their location and functions. (6 marks)
- Q.4 Analyse the control of body temperature during exercise in terms of;
- a) its homeostasis (8 marks)
 - b) response to environmental temperatures at critical and lethal levels. (15.3 marks)
- Q.5
- a) Expond on the following terms as they are applied to the nervous activity during exercise:
 - i) Stimulation (5 marks)
 - ii) Refractory period (5 marks)
 - b) Compare and contrast the nervous and hormonal communication in the human body. (13.3 marks)