## THE OPEN UNIVERSITY OF SRI LANKA

**B.Sc. DEGREE PROGRAMME** 

**FINAL EXAMINATION 2013/2014** 

**COURSE TITLE: HUMAN BIOLOGY** 

COURSE CODE: ZLU3185 / ZOU3165 / ZLE5185



DATE: 24th November 2014

TIME: 1.30 p.m. - 03.30 p.m.

## ANSWER ANY <u>FOUR</u> (4) QUESTIONS. ILLUSTRATE ANSWERS WITH LABELLED DIAGRAMS WHERE NECESSARY.

- 1. What is the vestibular apparatus? Describe how this apparatus performs its functions.
- 2. Explain how the body would adjust through physiological mechanisms in the following situations.
  - i) A British researcher living in an extreme dry heat environment, whilst on a threemonth field visit to the Sahara Desert
  - ii) A Sri Lankan undergraduate on a one month expedition to the North Pole, exposed to a very cold environment
- 3. Write an account on the birth control options available for
  - i) males
  - ii) females who want to use an oral contraceptive
- 4. Compare the fundamental features of the following.
  - i) Primary and Secondary immune responses
  - ii) Humoral and Cell-mediated immune responses
- 5. The human anatomy has evolved to facilitate bipedal locomotion. Justify this statement.
- 6. Write notes on two (02) of the following.
  - a) Conduction system of the heart
  - b) Prenatal testing
  - c) Glomerular ultrafiltration

\*\*\*\*\*\*