

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. DEGREE PROGRAMME
FINAL EXAMINATION 2015/2016
COURSE TITLE: HUMAN BIOLOGY
COURSE CODE: ZLU3185 / ZOU3165



DATE: 16th January 2017

TIME: 1.30 p.m. – 3.30 p.m.

ANSWER ANY FOUR (4) QUESTIONS.

ILLUSTRATE ANSWERS WITH LABELLED DIAGRAMS WHERE NECESSARY.

1. Aneuploidy in sex chromosomes leads to genetic disorders in human. Justify this statement, with suitable examples and diagrams to illustrate the answer.
2. Identify and briefly describe the types of synovial joints present in human.
3. A newly married couple seeks your advice on birth control options available for them to postpone having a baby for one year. Write an account on the information you would provide on the barrier methods available for their use.
4. Compare between the following.
 - (i) Immunity developed when a person is given the Polio vaccine with the immunity developed when a person is given an injection of Tetanus antibodies.
 - (ii) Immune response that develops when a child is vaccinated against the Chickenpox with the immune response that develops if this person is later naturally exposed to the Chickenpox virus.
5. Explain how the hormone mechanisms of the kidney function to regulate variations in water and sodium ion levels in the body.
6. Write notes on two (02) of the following.
 - a) Sensory and motor domains of the cerebral cortex.
 - b) Oxygen-haemoglobin dissociation curve.
 - c) Sense organs of dynamic equilibrium.
