

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES, MIHINTALE

B.Sc. (General) Degree in Applied Sciences Second year- Semester II Examination- April/May 2015

BIO 2108 – MAMMALIAN REPRODUCTIVE PHYSIOLOGY AND DEVELOPMENTAL BIOLOGY

Time: 1 1/2 hours

Answer three (03) questions only. Illustrate your answers with labeled diagrams where appropriate.

- 1. a) Discuss the functions of following cells in seminiferous tubules of human testes.
 - (i) Spermatogenic cells
- (ii) Leydig cells
- (iii) Sertoli cells
- (30 marks)
- b) Using a schematic diagram, illustrate human spermatogenesis.
- (70 marks)
- 2. a) State the role of androgens (Testosterone and DHT) in mammals.
- (20 marks)
- b) Explain the importance of estrogen, progesterone, relaxin and inhibin in female reproductive cycle. (80 marks)
- 3. a) Define the term 'Contraception'.

(10 marks)

b) "Hormonal contraceptive methods interfere with the normal hormonal changes of the female reproductive cycle" Using three examples, justify the above statement.

(90 marks)

4. a) Mention the major causes of congenital malformations in new borns babies.

(10 marks)

b) Write a concise account on the three stages of human embryonic development.

(90 marks)
