



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGICAL SCIENCES
4TH YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR
REGULAR

COURSE CODE: SBI 3411

**COURSE TITLE: HUMAN REPRODUCTIVE AND NEURO-ENDOCRINE
FUNCTIONS**

EXAM VENUE:

STREAM: (BSc BIO)

DATE: 13/12/16

EXAM SESSION: 2.00 – 4.00PM

TIME: 2 HOURS

Instructions

- 1. Answer ALL questions in Section A (compulsory) and ANY TWO questions in Section B**
 - 2. Candidates are advised not to write on the question paper**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
-

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. Outline any three hormonal factors that stimulate spermatogenesis. (3 marks)
2. With specific examples, describe the changes that occur during sperm capacitation. (3 marks)
3. Describe the processes that control testosterone secretion. (3 marks)
4. Describe the psychic factors that affect Gonadotrophin secretion and male sexual activity. (3 marks)
5. Giving specific examples, list three hierarchies of female hormonal system. (3 marks)
6. Describe the functions of hormones Estradiol and progesterones in female reproductive system. (3 marks)
7. Describe female erection and lubrication. (3 marks)
8. Explain abnormal conditions that can cause female sterility. (3 marks)
9. "Hypogonadism is responsible for irregular menses and amenorrhea". Explain this statement. (3 marks)
10. "Female ovarian cycles in nursing mothers are suppressed for many months after delivery". Giving specific examples, explain the role of hormones in this process. (3 marks)

SECTION B: ESSAY QUESTIONS(40 MARKS)

11. Describe the neuronal stimulus of the male sexual act. (20 marks)
12. With specific examples, describe the functions and effects of estrogen hormones on the female primary and secondary sexual characteristics. (20 marks)
13. The interplay between the ovarian and hypothalamic-pituitary hormones are important in the regulation of the female monthly rhythm". Discuss this statement. (20 marks)
14. Write an essay on the functions of the placenta. (20 marks)