



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**

**UNIVERSITY EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE
IN BIOLOGICAL SCIENCES
FOURTH YEAR FIRST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS-REGULAR**

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| COURSE CODE: | SBI 3411 |
| COURSE TITLE: | HUMAN REPRODUCTIVE AND NEUROENDOCRINE FUNCTION |
| EXAM VENUE... | STREAM: (BSC. BIO) |
| DATE: | EXAM SESSION: |
| TIME: 2 HOURS | |

Instructions:

- 1. Answer ALL questions in Section A and any two questions in Section B**
 - 2. Candidates are advised not to write on question paper**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. State three hormonal factors that stimulate spermatogenesis and their functions (3 marks)
2. Describe the processes involved in the sperm penetration of the ovum (3 marks)
3. Explain the effect of sperm morphology and motility on fertility (3 marks)
4. Name three coverings of the testis and their composition (3 marks)
5. Outline six causes of male infertility (3 marks)
6. State any three effects of estrogens on the breasts (3 marks)
7. Describe female erection and lubrication (3 marks)
8. Explain the effect of human chorionic gonadotropin on the fetal testes (3 marks)
9. Describe any two mechanical factors that increase uterine contractility (3 marks)
10. Outline hormonal initiation of lactation (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Describe the stages in male sexual act (20 marks)
12. With examples, describe how hormones from the hypothalamus and anterior pituitary gland control male sexual functions (20 marks)
13. Describe the monthly endometrial cycle and menstruation (20 marks)
14. Giving specific examples, describe response of the mother's body to pregnancy. (20 marks)