

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

RESIT/SPECIAL EXAMINATION

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE  
(BIOCHEMISTRY)

**BIOC 426: REPRODUCTIVE BIOCHEMISTRY**

**STREAMS: BSC (BIOC)**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 02/02/2021**

**11.30 A.M – 1.30 P.M.**

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### INSTRUCTIONS

- Answer question **ONE (COMPULSORY)** and any other **TWO** questions.
- Sketch diagrams may be used whenever they may help to illustrate your answer.
- Do not write anything on the question paper.
- This is a closed book exam. **No** reference materials are allowed in the examination room.
- There will be **No** use of mobile phones or any other unauthorized materials.
- Write your answers legibly and use your time wisely.

### QUESTION ONE (30 marks) compulsory

- a. Discuss the physiological role of the three accessory glands in male reproductive system  
(6 marks)
- b. Explain four common causes of female infertility  
(8 marks)
- c. Discuss major hormonal changes that occur in female mammals during pregnancy  
(8 marks)
- d. Explain the mechanism of actions of the drugs used in termination of pregnancy  
(8 marks)

**QUESTION TWO (20 marks)**

- a. Discuss the mechanism of penile erection in male (5 marks)
- b. Discuss hormonal changes during pregnancy in human (5 marks)
- c. Discuss three accessory glands and their functions associated with male reproductive system in mammals (6 marks)
- d. Distinguish three fundamental functions of female reproductive tract (3 marks)
- e. List the two signs and symptoms of toxemia during pregnancy (1 mark)

**QUESTION THREE (20 Marks).**

- a. Explain hormonal control of oogenesis (5 marks).
- b. Discuss two factor that lead to labor in female human during parturition (5 marks)
- c. Discuss the two types of oral contraceptive and their mode of action (10 marks)

**QUESTION FOUR (20 marks)**

- a. Discuss the major events associated with menstrual cycle (5 marks)
  - b. Explain the different between the monotremes, marsupial and placental mammals (5 marks)
  - c. Briefly discuss the hormonal control of spermatogenesis (5 marks)
  - d. Explain the major physiological functions of testosterone (5 marks)
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