

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FOURTH YEAR EXAMINATION FOR THE AWARD OF
DEGREE OF BACHELOR OF SCIENCE**

**BIOC 426: REPRODUCTIVE BIOCHEMISTRY
STREAMS: Y4S2**

TIME: 2 HOURS

DAY/DATE : WEDNESDAY 22 /09/ 2021

11.30 AM – 1.30 PM

INSTRUCTIONS TO CANDIDATES:

- Answer Question One and any other Two Questions.
- DO NOT WRITE ANYTHING on the question paper.

QUESTION ONE (COMPULSORY) 30 MARKS

- a) Explain 3 causes of Male Infertility. [6 Marks]
- b) Describe the mechanism of erection, lubrication and orgasm in human female. [7 Marks]
- c) Explain hormonal control of mammary glands during pregnancy. [4 Marks]
- d) Outline any 6 commonly prescribed ovulation drugs. [3 Marks]
- e) Highlight 5 features of toxemia (pre-eclampsia) in pregnancy. [5 Marks]
- f) Explain the pathogenesis and treatment of syphilis. [5 Marks]

QUESTION TWO (20 MARKS)

- a) Demonstrate the biosynthesis pathway of prostaglandins and explain their role in childbirth. [10 Marks]
- b) Explain 5 causes of defective ovulation. [10 Marks]

QUESTION THREE (20 MARKS)

- a) Describe the events during oogenesis that produce haploid oocyte from diploid cells. [10 Marks]
- b) Discuss the classification of oral contraceptives, formulations and their mode of action. [10 Marks]

QUESTION FOUR (20 MARKS)

- a) Discuss three accessory glands and their functions associated with male reproductive system in mammals. [7 Marks]
- b) Explain why a woman may feel cramping pains in her abdomen when she is menstruating. [3 Marks]
- c) Discuss in detail classification of reproduction based on the way mammals reproduce. [10 Marks]

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