
CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
BIOCHEMISTRY**

BIOC 405: REPRODUCTIVE BIOCHEMISTRY

STREAMS: BSC BIOCHEMISTRY Y4S2

TIME: 2 HOURS

**DAY/DATE: TUESDAY 09/04/2019
4.30 P.M.**

2.30 P.M. -

INSTRUCTIONS:

- **Answer question one and any other two questions**
- **Do not write on the question paper**

QUESTION ONE (30 MARKS)

- a Predict the effect of hysterosalpingogram (HSG) with oil on fertility of women (5 marks)
- b Briefly explain the mechanism of Mifepristone (RU-486) in termination of pregnancy (5 marks)
- c Briefly describe the mechanism of pregnancy toxemia. (5)

marks)

- d Briefly describe capacitation of the spermatozoa. (5 marks)
- e Ascertain the effect of estrogen and progesterone inhibition during endometrial cycle after fertilization. (5 marks)
- f Justify the use of norplant over other types of contraceptives (5 marks)

QUESTION TWO (20 MARKS)

- a Predict the impact of defective synthesis of follicle stimulating hormone on spermatogenesis (10 marks)
- b Evaluate the effect of estrogen deficiency in the selection of dominant follicle during menstrual cycle (10 marks)

QUESTION THREE (20 MARKS)

- a Evaluate the effect of combination pill consisting of estrogen and progestin components on contraceptive efficacy (10 marks)
- b Infer the dangers of aspirin intake during labour or delivery in expectant mothers (10 marks)

QUESTION FOUR (20 MARKS)

- (a) Discuss semen analysis in male infertility (10 marks)
 - (b) Infer the role of gonadotropin administration in relation to superovulation (10 marks)
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