

MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University) University Examinations for 2015/2016 Academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGY

SZL 306: HUMAN BIOLOGY

DATE: 5/8/2016 TIME: 8.30-10.30 AM

INSTRUCTIONS:

ANSWER QUESTION ONE IN SECTION A AND ANY OTHER TWO QUESTIONS IN SECTION B

SECTION A. COMPULSORY

1. a) Define the following terms (4 marks)

i. Carcinogen

ii. Gender

iii. Sex

b) Describe the two main body cavities (6 marks)

c) Name two bacterial and two viral diseases of man and mention how these are combated? (4 marks)

d) List the cause, symptoms and prophylactic measures of:

i. Amoebiasis (2 marks)

ii. Typhoid (2 marks)

- e) Differentiate between immunodeficiency and autoimmunity giving one example of each. (4 marks)
- f) What is the basis of classifying cancers? List two categories of cancers. (4 marks)
- g) Briefly describe the reproductive role of the male and female. (4 marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

- 2. a) Discuss the four barriers of innate immunity (8 marks)
 - b) Discuss the life cycle of the HIV virus (12 marks)
- 3. a) Discuss the medical implications of tradeoffs in human life history (10 marks)
 - b) Describe the level of structural organization of the body from the micro structure to complete organism. (10 marks)
- 4. a) Describe the effects of drug and alcohol abuse to human life. (10 marks)
 - b) The male's reproductive role requires four different structures. Name and briefly explain their functions. (10 marks)
- 5. Describe the stages of human development. (20 marks)