



MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN BIOLOGY

SZL 307 FUNDAMENTALS OF IMMUNOLOGY

DATE: 26/9/2019

TIME: 2.00-4.00 PM

INSTRUCTIONS: Answer question one and any other two questions

1.
 - a) Explain the bonding involved in the structure of an immunoglobulin molecule (3 marks)
 - b) Briefly describe non-susceptibility of a host to infection by parasites (3 marks)
 - c) Outline any three types / sources of vaccines (3 marks)
 - d) Giving two specific examples, define xenotransplantation (3 marks)
 - e) Outline any three factors involved in the development of an allergy (3 marks)
 - f) Explain Antibody specific with reference to Ab-Ag reactions (3 marks)
 - g) Explain the properties of antigens (3 marks)
 - h) Outline three (3) examples of natural body resistance to infectious disease causing organisms (3 marks)
 - i) Outline three pathways of acquiring immunity in man (3 marks)
 - j) Explain the response of the human body to viral infections (3 marks)
2.
 - a. Outline the structure of an immunoglobulin molecule (8 marks)
 - b. Characterize any four immunoglobulins (12 marks)
3. Discuss the role of blood in the defence of the human body against infection by disease causing agents (20 marks)
4. Discuss Antibody Dependent Cytotoxic Hypersensitivity in man (20 marks)
5. Discuss the various method of normal protection of human body against infection (20 marks)