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University Examinations 2024/2025

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELLOR OF
SCIENCE IN ANIMAL HEALTH AND PRODUCTION

AAP 3251: IMMUNOLOGY

DATE: DECEMBER 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer question *ONE* and any other *TWO* questions

QUESTION ONE (30 MARKS)

- a) Define the following terms as used in immunology (4marks)
 - i. Herd Immunity
 - ii. Opsonization
- b) Differentiate between an epitope and a hapten (4 marks)
- c) Define the following terms in regards to immunology (4marks)
 - i. Monoclonal antibodies
 - ii. Adjuvant
- d) Outline any four functions of immunoglobulin IgE (4 marks)
- e) Outline the four main effects of complement in immune response (4 marks)
- f) Discuss the various classes of innate immunity (6 marks)
- g) Outline any four types of defensive barriers that support innate immunity (4 marks)

QUESTION TWO (20 MARKS)

Discuss the roles of the various cells that participate in the innate immune responses (20 marks)

QUESTION THREE (20MARKS)

Describe the key steps in the activation of alternative complement pathway (20 marks)

QUESTION FOUR (20 MARKS)

Discuss the various factors affecting production of antibodies (20 marks)