

ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATTE, NIGERIA

BASIC & APPLIED SCIENCES BIOLOGICAL SCIENCES SECOND SEMESTER EXAMINATION 2017/2018 ACADEMIC SESSION

COURSE	CODE:	BTH 410

COURSE TITLE: ANIMAL BIOTECHNOLOGY

DURATION: 2 HOURS

NAME:.....MAT. No:....

INSTRUCTION

Answer any FOUR questions.

OUESTIONS

- 1 a. i) What are immunoglobulins? ii) State the three main functions of antibodies.
 - b. i) Explain the general structure of immunoglobulins.
 - ii) Which isotopic form of immunoglobin is transferred from mother to foetus?
 - c. Discuss the isotopic form of immunoglobulin based on heavy chains.
- 2 a. List five advantages and disadvantages of artificial insemination
 - b. Enumerate the steps of artificial insemination.
 - c. Explain the possible factors affecting conception rate.
- 3 a. Write short note on the following terms:
 - i) J-chain
 - ii) Secretory piece
 - iii) Phagocytosis
 - iv) Antigen
 - v) Allergen
 - b. Explain the differences between active and passive immunity.
 - c. Distinguish between immunotherapy and autoimmunity.
- 4 a. Define marker assisted selection (MAS) as a tool in animal breeding.
 - b. Explain the different types of markers.
 - c. What are the advantages of MAS over conventional breeding?
- 5 a. i) What is a vaccine? ii) Differentiate between vaccination and immunization.
 - b. Differentiate between attenuated and inactivated vaccines.
 - c. Enumerate the types of vaccines
- 6. a. State the applications of animal tissue culture under the following headings:
 - i) Genetic engineering
 - ii) Model system
 - iii) Cancer research
 - iv) Virology
 - v) Toxicity testing
 - b. i) What is your understanding of estrous synchronization? ii) List the phases of estrous circle.
 - c. States the advantages of estrous synchronization.