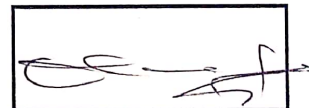




ELIZADE UNIVERSITY, ILARA-MOKIN,
ONDO STATE, NIGERIA

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:.....

INSTRUCTIONS

Answer any FOUR questions.

QUESTIONS

- 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 immunoglobulin 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.