

UNIVERSITY OF SWAZILAND
FACULTY OF AGRICULTURE

DEPARTMENT: ANIMAL PRODUCTION AND HEALTH

FIRST SEMESTER EXAMINATIONS: 2004/2005

**BACHELOR OF SCIENCE IN AGRICULTURE: APH (OPTION), AGED, HE,
HEE YEAR V**

COURSE CODE: APH 502

TITLE OF PAPER: POULTRY PRODUCTION

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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GRANTED BY THE CHIEF INVIGILATOR.**

EXAMINATION QUESTIONS**Page 2 of 2**

1. a) What are the conditions of eggs and environment that could influence hatchability in the incubator? (15 marks)

b) Outline the causes of low fertility and embryonic mortality. How do you sex chicks at day old? (10 marks)
2. Discuss how to brood and rear pullets to point of lay. How do you detect fertile and living embryos in incubation? (25 marks)
3. a) Discuss the basic nutrients and sources of proteins and energy in poultry nutrition. (15 marks)

b) Outline the anti-nutritional factors in poultry feeds and state how some of them are detoxified. (10 marks)
4. The UNISWA Teaching and Research Farm (Poultry section) is to raise 500 broilers for the forthcoming X-mass season. The feed ingredients gathered on analysis in the nutrition lab revealed that maize contain 10% CP and Groundnut cake had 45% CP.
 - a. Formulate diets with 24% CP and 21% CP for the starter and finisher phases respectively. Check you formulae. (10 marks)
 - b. If you are to compound 2 tonnes and 3 tonnes of feeds for the starter and finisher phases respectively, what quantities of maize and groundnut cake shall be required? (10 marks)
 - c. If it costs E 2.00 and E 5.00 per Kg to purchase the maize and groundnut cake, what is to be the amount to be requested from the APH department to purchase these ingredients? (5 marks)
5. Newcastle disease and coccidiosis are serious problems in the poultry industry.
 - a) Discuss the causes, transmission, clinical signs, diagnosis and treatment/control. (20 marks)
 - b) Which species of poultry do they affect? (5 marks)
6. a) Draw and discuss the digestive system of a chicken. (15 marks)

b) Write short notes on:
 - i) the ovary
 - ii) the oviduct
 - iii) male reproductive systems in poultry (10 marks)