



UNIVERSITY OF SWAZILAND  
Faculty of Health Sciences  
Department of Environmental Health Science

DEGREE IN ENVIRONMENTAL HEALTH SCIENCE  
SUPPLEMENTARY EXAMINATION PAPER 2019

TITLE OF PAPER : MEAT PATHOLOGY  
COURSE CODE : EHM 409  
DURATION : 2 HOURS  
MARKS : 100

INSTRUCTIONS : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY  
: ANSWER ANY FOUR QUESTIONS.  
: EACH QUESTION CARRIES 25 MARKS.  
: WRITE NEATLY & CLEARLY  
:  
: BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR.**

### QUESTION ONE

(a) Define the following terms

- |        |                    |          |
|--------|--------------------|----------|
| (i)    | Ecchymoses         | [1 Mark] |
| (ii)   | Catarrhal rhinitis | [1 Mark] |
| (iii)  | Commensalism       | [1 Mark] |
| (iv)   | $D_{60} = 15$      | [1 Mark] |
| (v)    | Laminitis          | [1 Mark] |
| (vi)   | Purulent           | [1 Mark] |
| (vii)  | Orchitis           | [1 Mark] |
| (viii) | Dyspnoea           | [1 Mark] |
| (ix)   | Emphysema          | [1 Mark] |
| (x)    | Petechia           | [1 Mark] |

(b) How would you differentiate Swine Influenza from Swine fever 15 Marks]

[Total: 25 marks]

### QUESTION TWO

The following situation, describes an outbreak of disease in Big Bend – Swaziland, and an account of some observations are listed below;

- Highly fatal virus disease [zoonotic],
- All mammals are susceptible though primarily affect carnivores,
- Man is infected through rabid dog bite,
- Symptoms seen are associated with the nervous system which are manifested as motor irritation and paralysis,
- Although domestic dog is the chief transmitter of disease to man, domestic cats, wild and feral carnivores [including jackals, foxes and wolves] and bats [especially vampires, but also insect and fruit-eating bats] can be infected and transmit disease.

Identify the disease, elaborate on causative agents, mode of transmission and symptoms

[Total: 25 Marks]

### QUESTION THREE

(a) During the outbreak of unknown disease one observes the following,

- It is acute, highly contagious viral disease,
- predominantly of cattle but will affect all cloven footed animals including pigs,
- It is manifested by initial fever and lesions on the mouth and the feet,
- The virus is highly resistant to freezing and even to some strong disinfectants,

Suggest the name of disease, distribution in terms of occurrence, causative agents, transmission, and Symptoms

[Total: 25 Marks]

**QUESTION FOUR**

- (a) Define the terms zoonosis, emphysema and suppurative [3 Marks]
- (b) Which one of the listed diseases is Zoonotic
- (i) Black leg (Blackquarter),
- (ii) Brucellosis (Contagious Abortion) [2 Marks]
- (c) Give an account of the zoonotic disease you have chosen in (b), detailing causative agent, mode of transmission, symptoms & possible control. [20 Marks]
- [Total: 25 marks]

**QUESTION FIVE**

Discuss the causative agents, transmission and symptoms of Avian influenza in birds [Total: 25 Marks]