UNIVERSITY OF NAMIBIA

FACULTY	HEALTH SCIENCES AND VETERINARY MEDICINE		
SCHOOL	SCHOOL OF VETERINARY MEDICINE		
DEPARTMENT	PARA CLINICAL STUDIES		
MODULE	INFECTIOUS DISEASES II		
MODULE CODE	V3712AI		
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DURATION	3 HRS	**MARKS**	150

FIRST OPPORTUNITY EXAMINATION

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This question paper consists of **seven (7)** pages including this front page. Additional materials to be supplied: **None**
Instructions: *This question paper consists of Section A, B, C and D. Answer all questions.*

SECTION A: MULTIPLE CHOICE QUESTIONS **[25 marks, 1 mark each]**

1. Which of the following genera of poxviruses is NOT routinely transmitted by insects?
   a) Parapoxvirus
   b) Goatpoxvirus
   c) Swinepoxvirus
   d) Sheeppoxvirus
2. Which of the following statements about Porcine parvovirus (PPV) is least correct?
   a) PPV is a major cause of reproductive failure in pigs.
   b) Mummification of fetuses is a common feature of infection with PPV.
   c) Abortions due to PPV are usually accompanied by enteritis and upper respiratory disease in pregnant sows.
   d) PPV infection induces strong, possibly life-long immunity to re-infection.
3. Which of the following steps should not be done for the prevention of infectious diseases?
   a) Proper disposal of dead infected animals
   b) Disinfection of the animal house
   c) Freedom of infected animals
   d) Vaccination of animals against major diseases
4. Which of the following diseases can spread to humans while milking?
   a) Foot and Mouth disease
   b) Smallpox
   c) Ranikhet
   d) Cowpox
5. Which of the following is not a method by which Rinderpest is spread amongst cattle?
   a) Contact
   b) Contaminated feed
   c) Flies
   d) Clean water
6. Which of the following is incorrect about Bird Flu?
   a) Caused by H5N1
   b) Does not affect humans
   c) Also known as Avian influenza
   d) Attacks poultry birds
7. Which of the following properties do Parvoviruses and Circoviruses have in common?
   a) Have a ds DNA genome
   b) Have a circular genome
   c) Require rapidly dividing cells for replication
   d) Encode viral polymerase in the genome
8. Marek's disease virus infection in chickens results in a proliferation of:
   a) T lymphocytes
   b) B lymphocytes
   c) Basophils
   d) Neutrophils

17. The "natural" host of pseudorabies virus is:
    a) Dogs
    b) Cattle
    c) Sheep
    d) Swine
18. The reservoir of malignant catarrhal fever virus in Africa and in countries outside of Africa are:
    a) Birds and Rodents
    b) Mosquitos and Tse-tse flies
    c) Springbok and White-tailed deer
    d) Wildebeest and Sheep
19. Pseudorabies virus may cause disease in all of the following EXCEPT:
    a) Monkeys
    b) Rodents
    c) Swine
    d) Cats
20. Which of the following is NOT a reportable/ notifiable disease in Namibia?
    a) Pseudorabies
    b) Malignant Catarrhal Fever
    c) Lumpy skin disease
    d) Avian encephalomyelitis
21. Contagious ecthyma or Orf, the disease caused by parapoxvirus is most significant in lambs because:
    a) It causes oral lesions that hinder nursing
    b) It spreads systemically
    c) There is no vaccine
    d) It causes cutaneous fibromas that enlarge and spread
22. The viruses of Duck Plague and Infectious Laryngotracheitis (ILT) are all members of which of the following family?
    a) Iridoviridae
    b) Herpesviridae
    c) Picornaviridae
    d) Arteriviridae
23. All of the following herpesviruses may lead to abortion in pregnant animals EXCEPT:
    a) Equine herpesvirus-1
    b) Bovine herpesvirus-1
    c) Canine herpesvirus-1
    d) Marek's disease virus
24. The primary or main target cell of malignant catarrhal fever virus is which of the following cells?
    a) Lymphocytes
    b) Red blood cells
    c) Neurons
    d) Neutrophils

(y) It is easy to clinically distinguish between highly pathogenic avian influenza and virulent Newcastle disease as they are two distinct disease entities caused by viruses belonging to two different families

QUESTION 2. Fill in blanks questions **[5 marks]**

(a) Adenoviruses are frequently used as experimental vectors for.....and ....., as well as vectors for.....
(b) A ..... is used to collect tissue scrapings from the oropharynx for laboratory identification of animals persistently infected with FMD virus.
(c) The confirmation diagnosis of rabies in the laboratory is done by microscopic pathology on formalin fixed brain tissue, where one has to look for.....
(d) Among all domestic animals, ... are more susceptible to calicivirus infection
(e) Parvoviruses require ..... for their replication

SECTION C: SHORT ANSWER QUESTIONS **[25 marks]**

QUESTION 1. Explain the differences between "infection" and "infestation". **[2 marks]**

QUESTION 2. Name three important diseases of ruminants caused by myxoviruses **[3 marks]**

QUESTION 3. Bovine Respiratory Syncytial virus (BRSV) is a common virus that affects cattle around the world. Why is it of veterinary importance? **[2 marks]**

QUESTION 4. Rabies infection is maintained in two epidemiological cycles. Name these cycles and the main reservoir for each of them in Namibia **[4 marks]**

QUESTION 5. Explain the danger associated with farmers/dog owners examining a dog or livestock with paralytic/dumb form of rabies to find out what is wrong with the animal. **[3 marks]**

QUESTION 6. **[5 marks]**

a) Other than rabies, name three other diseases caused by members of *Rhabdoviridae* **[3 marks]**
b) Name two important prion diseases in humans **[2 marks]**

QUESTION 7. Marek's disease virus causes, among other things, immunosuppression because the virus replicates in which tissues? **[1 mark]**

SECTION D: STRUCTURED QUESTIONS **[70 marks]**

QUESTION 1. **[15 marks]**

(a) Describe the possible clinical signs that can be observed in equines affected by Equine Encephalosis **[10 marks]**

(b) Indicate the diseases that should be considered for differential diagnosis of Equine Encephalosis in horses. **[5 marks]**

QUESTION 2. **[19 marks]**

(a) Describe graphically the various stages of the pathogenesis of Feline Leukemia Virus (FeLV).