



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION: BACHELOR OF ENVIRONMENTAL HEALTH SCIENCES, HUMAN NUTRITION AND HEALTH INFORMATION MANAGEMENT SYSTEM	
QUALIFICATION CODE: 08BOHS, 08BOHN, 07BHIS	LEVEL: 6
COURSE: EPIDEMIOLOGY 2B	COURSE CODE: EPD 612S
SESSION: JANUARY 2023	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

SUPPLEMENTARY/SECOND OPPORTUNITY EXAMINATION PAPER	
EXAMINER(S):	MR JOSHUA HIDINWA
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INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.

PERMISSIBLE MATERIALS

NONE

THIS QUESTION PAPER CONSISTS OF 7 PAGES (Including this front page)

SECTION A [30 MARKS]

QUESTION 1

[10 MARKS]

Select most appropriate answer from the options provided.

Example: 1.35 A

1.1 Which of the following is secreted in the saliva of the infected animals: [1]

- A. Malaria
- B. Cholera
- C. Anaemia
- D. Congo fever
- E. Rabies

1.2 Which of the following is the reservoirs of the rabies infections: [1]

- A. Faecal hands
- B. Sewerage
- C. Humans
- D. Dogs
- E. Contaminated water

1.3 Which of the following disease causes abortion, premature delivery of the foetus
And death in animal: [1]

- A. P. Mansoni
- B. P. Respiratory infection
- C. Brucellosis
- D. Mechanical vector-borne transmission
- E. P. falciparum

1.4 Mode of transmission of Brucellosis is: [1]

- A. Wastewater
- B. Ingestion of untreated water
- C. Overcrowded
- D. Contact with infected blood
- E. Unvaccinated animals

1.5 What is the incubation period of Rift Valley Fever? [1]

- A. 2 to 5 days
- B. 1 day
- C. 4 to 6 hours
- D. 1 to 6 days
- E. 12 hours

1.6 Which of the following is an acute disease of domestic ruminants caused by a mosquito-borne virus: [1]

- A. Brucella
- B. Malaria
- C. Tuberculosis
- D. Rift Valley Fever
- E. Rabies

1.7 Which of the following is a highly contagious acute respiratory illness which affects humans and animals: [1]

- A. HIV
- B. Tuberculosis
- C. Plasmodium
- D. Malaria
- E. Influenza

1.8 Protection of infants from infection up to 3 months of age is due to: [1]

- A. Mother and baby relationship
- B. Breast feeding corner
- C. The care of mother
- D. Presence of fetal haemoglobin
- E. Formula used for the baby

1.9 Herd immunity depends on: [1]

- A. Subclinical infection
- B. Immunization status of herd
- C. Herd structure
- D. Herd participation
- E. Community leader

1.10 All of the following are symptoms of Hepatitis B except: [1]

- A. Nausea,
- B. Jaundice
- C. Fatigue,
- D. Vomiting,
- E. Runny nose

QUESTION 2

[10 MARKS]

Indicate which of the following statements is **True** or **False**

2.1 Most Influenza A viruses are classified as low pathogenic strains. [1]

2.2 Anthrax is not common in agricultural regions. [1]

2.3 Ebola is transmitted by direct contact with the blood, body fluids and tissues of infected persons. [1]

2.4 Animals are infected with Anthrax during milking. [1]

2.5 Plague is an acute disease of animals and humans caused by a bacteria Transmitted from small animals to humans by the bite of infected fleas. [1]

2.6 Streptococcus pneumoniae it does not infect bronchi, and alveoli. [1]

2.7 Trypanosomiasis is a disease that only affects humans. [1]

2.8 Ebola is not highly virulent viral haemorrhagic fever that is often fatal in man and other primates. [1]

2.9 Plague can be a very severe disease with a case-fatality ratio of 30%-60% if untreated. [1]

2.10 Influenza A viruses does not cause any type of pandemics. [1]

QUESTION 3**[10 MARKS]**

Match the statement in column 1 to the corresponding concept(s) in column 2.

Example: 2.24 A. (Each correct answer earns 1 mark).

Column 1		Column 2	
3.1	Occurs when a person has been infected and has mounted an immune response but exhibits no symptoms.	A	Carrier
3.2	Is a person, animal or arthropod who harbours an infectious agent in the absence of clinical illness with or without an accompanying detectable immune response.	B	Primary
3.3	This is the first case identified as part of an outbreak.	C	Case
3.4	The first case to introduce an infection into a population.	D	Asymptomatic infection
3.5	A person with gastrointestinal or other relevant infection who has been identified as having a particular disease.	E	Congo fever (Haemorrhagic fever)
3.6	Any infectious disease capable of being passed directly from one person to another.	F	Epidemiological link
3.7	Cases are thought to have, a potential common source.	G	Index case
3.8	The period during which a person is likely to have been exposed to a pathogen.	H	Influenza (flu)
3.9	Any infection of the gastrointestinal tract, regardless of the source. Gastroenteritis may be bacterial, viral or protozoal in nature.	I	Infection
3.10	The segregation of cases (that may be symptomatic or asymptomatic) from the uninfected population.	J	Contagious
		K	Isolation
		L	Gastroenteritis
		O	Pandemic
		Q	Exposure interval

SECTION B [20 MARKS]

QUESTION 4

[20 MARKS]

Define the following epidemiological terms:

- 4.1 Microbiological clearance: [2]
- 4.2 Poliomyelitis: [2]
- 4.3 Salmonella food poisoning: [2]
- 4.4 Larvicide: [2]
- 4.5 Repellent: [2]
- 4.6 Asymptomatic infection: [2]
- 4.7 Carrier: [2]
- 4.8 Contact: [2]
- 4.9 Epidemiological link: [2]
- 4.10 Exposure-prone groups: [2]

SECTION C [30 MARKS]

QUESTION 5:

[20 MARKS]

- 5.1 Vectors are classified according to their method of transmitting disease into mechanical and biological vectors elaborate on those methods. [10]
- 5.2 Discuss the challenges for IHR 2005 implementation of member states. [10]

QUESTION 6:

[10 MARKS]

6.1 Surveillance is an essential feature of epidemiologic practice discuss the uses of surveillance.

[10]

SECTION D [20 MARKS]

QUESTION 7:

[20 MARKS]

7.1 Outline Surveillance under the following activities:

[10]

A. Passive surveillance.

[3]

B. Active surveillance.

[3]

C. Sentinel reporting.

[4]

7.2. Discuss the Criteria for Selecting Vector Control Measures.

[10]

Good luck!!

TOTAL: 100 MARKS