



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES
DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION: BACHELOR ENVIRONMENTAL HEALTH SCIENCES	
QUALIFICATION CODE: 08BOHS	LEVEL: 7
COURSE CODE: FMH 711S	COURSE NAME: FOOD AND MEAT HYGIENE 3
SESSION: JUNE 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS:130

FIRST OPPORTUNITY EXAMINATION PAPER	
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MODERATOR:	MR IMMANUEL ZERIAPI

THIS QUESTION PAPER CONSISTS OF 5 PAGES
(including this front page)

INSTRUCTIONS	
1	Answer ALL the questions.
2	Write clearly and neatly.
3	Number the answers clearly.

PERMISSIBLE MATERIALS
NONE

SECTION A [40 MARKS]

QUESTION 1 (10 MARKS)

1.0 Select The best possible answer.

1.1 A muscular tube joined to the trachea runs from the pharynx to the stomach. [1]

- A. Omentum
- B. Urethra
- C. Oesophagus
- D. Glands
- E. None of the above

1.2 The following bones do belong to the Hind leg except for. [1]

- A. Pelvic bone and femur
- B. Patella and phalanges
- C. Tibia and fibula
- D. Tarsal bones and
- E. Carpal and Metacarpal bones

1.3 What is the condition characterized by low red blood cells counts calls? [1]

- A. Diarrhoea
- B. Bleeding
- C. Anaemia
- D. Ebola
- E. None of the above

1.4 The visceral pleura: [1]

- A. Is the fluid around the lungs
- B. Is the thinnest portion of the peritoneum
- C. Is the membrane lining the wall of the thoracic cavity?
- D. Is the membrane lining the surface of the lungs?
- E. None of the above

1.5 The stiffness of muscle tissue in rigor mortis partially results from: [1]

- A. Excessive contraction of the fibers
- B. Excessive acetylcholine activity on muscle
- C. Excessive calcium release in muscle
- D. Excessive lactic acid builds up
- E. None of the above

1.6 The small intestines includes all of the above except: [1]

- A. Jejunum
- B. Colon
- C. Ileum
- D. Mesenterium
- E. Duodenum

- 1.7 Where are red blood cells produced? [1]
A. Bone marrow of long bones
B. Saliva
C. Blood pallets in long bones
D. Lymph in long bones
E. Semen
- 1.8 The space in the middle of the thoracic cavity where the heart resides is the: [1]
A. Dorsal cavity
B. Pericardial cavity
C. Pleural cavity
D. Pericardium
E. Mediastinum
- 1.9 The last five (5) ribs which are connected to the sternum with cartilage are known as: [1]
A. Real ribs
B. False ribs
C. Muscled ribs
D. Cartilage ribs
E. None of the above
- 1.10 The cartilaginous rings lined with mucous membrane are named: [1]
A. Lobes
B. Septum
C. Larynx
D. Trachea
E. None of the above

QUESTION 2 (10 MARKS)

2.0 The following diseases and conditions are caused or related to organisms:

- 2.1 Brucellosis in cattle [1]
- 2.2 Cysts [1]
- 2.3 Cysticercosis cellulose [1]
- 2.4 Mastitis [1]
- 2.5 Erysipelas [1]
- 2.6 Lympy skin disease [1]
- 2.7 Botulism [1]
- 2.8 Anthrax [1]
- 2.9 Tetanus [1]
- 2.10 Pimply gut [1]

QUESTION 3 (10 MARKS)

- 3.0 “the meat Inspector shall when inspecting a carcass – (I)have regard to – “
Mention the points to consider when you do a post-mortem inspection. [10]

QUESTION 4 (10 MARKS)

- 4.0 Match the concept in column A with the corresponding description in column B.
In your answer book, only write down the number in column A and the corresponding letter in column B. [10]

COLUMN A	COLUMN B
4.1.Red blood cells	A. the same as the ones in single stomach animals
4.2 Smooth muscles	B. Muscular and elastic walls
4.3 Vein	C. Found in internal organs
4.4 Reticulum	D. Transport oxygen from the lungs to the rest of the body
4.5 Arteries	E. Honeycomb shape
4.6 Synovial membrane	Manufactured in the spleen and bone marrow.
4.7 Omasum	G. Found in the knee.
4.8 Blood	H.Contol body temperature
4.9 White blood cells	I. Leaf stomach
4.10 Abomasum	J.Transport blood from tissue to heart

SECTION B [40 MARKS]

QUESTION 5 (20 MARKS)

- 5.1 Define the following food and meat hygiene-related terms: [3]
- 5.2 Illustrate by means of a table the difference in the kidney between the four different animals (bovine, ovine, and porcine) [9]
- 5.3 Educate first-year students on the digestive system of ruminants. [8]

QUESTION 6 (20 MARKS)

- 6.0 Mention the general pathological conditions as well unsatisfactory conditions of the following parts and list the lymph node (s) present in these parts.
- 6.1 Spleen [2]
 - 6.2 Heart [3]
 - 6.3 Intestines [3]
 - 6.4 Liver [6]
 - 6.5 Lungs [6]

SECTION C [50]

NB!!Select only one question in Section C

QUESTION 7 (50 MARKS)

- 7.1 Explain to the students how to do the thoracic cavity inspection of bovine. [10]
- 7.2 Write detailed notes on Bovine Spongiform Encephalopathy (BSE) (Mad Cow Disease and Measles (cattle) as well as the final judgment thereof in a carcass. [10]
- 7.3 Illustrate by means of a diaphragm the different lymph nodes and allocation on an ovine carcass, to third year EHS students. [10]
- Head
 - Organs
 - Carcass
- 7.4 Explain in detail the requirements for a small-scale abattoir to the owner of arm X. [20]

QUESTION 8 (50 MARKS)

- 8.1 Write detailed notes on Foot and Mouth as well as the final judgment thereof. [10]
- 8.2 Differentiate between Anthrax and Rabies during an ante mortem inspection. [20]
- 8.3 Provide Health Education to the farm owners in region A about rigor mortis, a common condition because they killed the animals with big knives. [10]
- 8.4 Clarify the symptoms, lesions, and the judgment of swine erysipelas. [10]

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