

PROGRAMME : NATIONAL DIPLOMA: ENVIRONMENTAL HEALTH

MODULE : FOOD AND MEAT HYGIENE 111

CODE : FMH 32-1

<u>DATE</u>: JANUARY (SUPPLEMENTARY), 2018

DURATION: 180 MINUTES

TOTAL MARKS : 150 MARKS

<u>LECTURER</u> : MS MPINANE FLORY SENEKANE

MODERATOR: MR. CRAIG PILLAY

NUMBER OF PAGES: 4 (FOUR) INCLUDING COVER PAGER

INSTRUCTIONS:

- 1. CELL PHONES MUST BE SWITCHED OFF OR PUT ON SILENT FACING UPSIDE DOWN ON THE DESK.
- 2. READ THE QUESTION CAREFULLY BEFORE YOU ANSWER.
- 3. ANSWER ALL QUESTIONS.
- 4. WRITE LEGIBLY.
- 5. LEAVE SPACE BETWEEN ANSWERS
- 6. FOR LONG ANSWERS, THERE SHOULD BE THREE PARAGRAPHS IN ONE PAGE.
- 7. INCORRECT NUMBERING OF ANSWERS WILL BE MARKED AS WRONG. REVISE NUMBERING BEFORE SUBMITTING THE ANSWER SHEET.
- 8. USE BLUE/BLACK INK PENS ONLY TO ANSWER THE QUESTIONS.
- 9. DO NOT SPLIT THE ANSWERS. ONLY THE FIRST PART OF THE ANSWER WILL BE ALLOCATED MARKS.
- 10. <u>KEEP SILENT UNTIL THE END OF ASSESSMENT</u>. A CANDIDATE WHO BREAKS THIS INSTRUCTION WILL BE DISQUALIFIED.

QUESTION 1

- 1.1 Identify any three (3) pathological conditions in red meat animals that start with the letter "E" (3)
- **1.2** Identify any two (2) pathological conditions in red meat animals that start with the letter "M" (2)
- 1.3 What is the name given to the outer part of the heart? (1)
- 1.4 Define Brucellosis. (2)
- 1.5 Identify and discuss four (4) specific important roles of Environmental health practitioner at sea and airports.(16)
- 1.6 Food is classified according to ease of spoilage. Identify two food classifications and provide five examples of each classification. (12)

[36]

QUESTION 2

2.1 Complete the following table for raw milk to be further processed. Your answer should be based on Dairy Standards in South Africa.

TEST	<u>SPECIFICATION</u>
<u>pH</u>	
Freezing point	
<u>Inhibitory Substances</u>	
Butterfat	
Titratable Acidity	
Resazurin	

(6)

2.2 Arrange the following stages of processing of milk in such a manner that there is a logical sequence of events.

Distribute, Receiving of raw milk, Cold room, Milk enters refrigerated holding tanks, Filling into containers, Homogenize, Standardize, Cooling, Separate, Pausterization. (10)

[16]

QUESTION 3

- 3.1 Identify and discuss any 5 (five) challenges that South Africa faces in terms of genetically modified foods.(10)
- **3.2** Mention 6(six) factors that entail good milking practices in the milk shed. **(6)**
- 3.3 List $6 ext{ (six)}$ components of a herd plan in the farm (6)

[22]

QUESTION 4

- **4.1** Name any five National Ports Authorities that are found in South Africa **(5)**
- **4.2** The Hazard analysis critical control point planning system involves twelve important steps. List and briefly discuss these steps and provide practical examples. (36)

[41]

QUESTION 5

- **5.1** Discuss the role of the National Executive Officer in terms of section 2 of Meat Safety Act, (Act no. 40 of 2000). (10)
- **5.2** Write comprehensive notes on jaundice using the following headings:
- 5.2.1 Definition (1)
- **5.2.2** Three major categories that cause jaundice (6)
- 5.2.3 Signs and symptoms (4)
- **5.2.4** Judgement (9)

[30]

QUESTION 6 Discuss emphysema under the following headings: 6.1 Definition (1) 6.2 Cause (1) 6.3 Signs and symptoms (1) 6.4 Judgement (2) [5]