



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

DIPLOMA IN ENVIRONMENTAL HEALTH
FINAL EXAMINATION PAPER 2005

TITLE OF PAPER : FOOD & MEAT HYGIENE

COURSE CODE : EHS 101

DURATION : 3 HOURS

MARKS : 100

INSTRUCTIONS :

- : ANSWER ALL FIVE (5) QUESTIONS
- : EACH QUESTION CARRIES 20 MARKS.
- : NO PAPER SHOULD BE BROUGHT INTO NOR OUT OF THE EXAMINATION ROOM.
- : BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

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

Question 1

Multiple Choice Questions

(Choose the most appropriate answer)

1. Aitch or rump in beef meat refers to the;
A. Pelvic bones
B. Fibula
C. Radius
D. Ulna

2. Thin silver bone in cattle refers to which bone
A. Pelvic bones
B. Fibula
C. Radius
D. Ulna

3. Shank in cattle refers to which bone
A. Metacarpus
B. Metatarsus
C. Fibula
D. Radius

4. Shin in cattle refers to which bone?
A. Ilium
B. Radius
C. Ischium
D. Pubis

5. In which of the four stomach compartments does digestion occur or begin;
A. Reticulum
B. Omasum
C. Rumen
D. Abomasum

6. Sheep fats have a high amount of -----fatty acids
A. Olein
B. Stearin
C. Palmitin
D. Linolenic

7. Pig fats have a high amount of -----fatty acids
A. Olein
B. Stearin
C. Palmitin
D. Linolenic

8. The positional term posterior refers to;
 - A. nearer the head
 - B. nearer the back
 - C. nearer the tail
 - D. nearer the front

9. The positional term, anterior refers to;
 - A. nearer the head
 - B. nearer the back
 - C. nearer the tail
 - D. nearer the front

10. Milk curdling during the process of cheese making, occur in the presence of which enzyme;
 - A. Amylase
 - B. Pepsin
 - C. Ptyalin
 - D. Rennin

11. Meat tenderizing (partially digestion of tough meat) is a process which makes meat more palatable and it occurs in the presence of which enzyme;
 - A. Amylase
 - B. Pepsin
 - C. Ptyalin
 - D. Rennin

12. Pig saliva contains a starch splitting enzyme known as:
 - A. Amylase
 - B. Pepsin
 - C. Ptyalin
 - D. Rennin

13. In heifer meat, high vitamin A is stored in;
 - A. Kidney
 - B. Spleen
 - C. Liver
 - D. Heart

14. In the female, the front edge of the pubis is;
 - A. Rounded and blunt, and thickens at the junction to form the pubic tuberosity
 - B. Sharp and forms a continuous line to give attachment to muscles of the abdomen wall
 - C. Flat forming most of the floor area of the pelvic bone
 - D. Short and joins the pubic symphysis and the ischium

15. Which function best describe the polyvinyl chloride (PVC) tiles;
- A. Resistant to wear
 - B. Resistant to heat
 - C. Slippery when wet
 - D. Warn to stand on
16. Which one of the statements is not correct in reference to chlorine based sanitizers;
- A. are bactericidal, fungicidal and virucidal
 - B. are more corrosive at high temperatures
 - C. are not affected by high temperatures
 - D. will kill all vegetative cells encountered
17. Sodium benzoate is added in soft drinks in Swaziland in order to;
- A. Destroy bacteria
 - B. Destroy molds
 - C. Inactivate enzymes
 - D. Restore the color of soft drinks
18. Which one of the food list is not a by-product of microorganisms;
- A. Cheese
 - B. Yogurt
 - C. Fermented milk
 - D. Ice cream
19. Which bacterium is likely to be found in the human nose;
- A. Staphylococcus aureus
 - B. Listeria monocytogenes
 - C. Salmonella spp.
 - D. None of the above
20. Name any bacteria which is likely to contaminate food via human excreta.
- A. Staphylococcus aureus
 - B. Bacillus anthracis
 - C. Aspergillus parasiticus
 - D. Salmonella typhi

[20 Marks]

Question 2

Describe the routine meat examination of cattle in Swaziland with reference to the following

- head [5]
- visceral organs [7]
- offals [3]
- carcass [5]

[20 Marks]

Question 3

- a) Describe the process of food absorption in the small intestines. [6]
 - b) Name any five (5) diseases which are zoonotic [4]
 - c) How does pre-slaughter care influence the quality of meat [10]
- [20 Marks]

Question 4

- a. Compare the benefits of quaternary ammonium compounds over those of chlorine based. [5]
 - b. State six (6) limitations of chlorinated based sanitizers in the kitchen. [6]
 - c. Which cleaning method would you choose between (CIP and COP) and state your reasons for any choice. [6]
 - d. What are the major disadvantages of the use of amphoteric sanitizers. [3]
- [20 Marks]

Question 5

- a. What is the responsibility of food handlers in relation to food safety in the food establishment. [10]
 - b. You have been placed at Swaziland Meat Wholesalers(Ngwenya) abattoir as EHO in charge, what improve would you recommend and why? [10]
- [20 Marks]