



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

DEGREE IN ENVIRONMENTAL HEALTH
SUPPLEMENTARY EXAMINATION PAPER 2017

- TITLE OF PAPER** : FOOD HYGIENE
- COURSE CODE** : EHS 227
- DURATION** : 2 HOURS
- MARKS** : 100
- INSTRUCTIONS** :
- : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
 - : ANSWER ALL FOUR (4) QUESTIONS
 - : EACH QUESTION CARRIES 25 MARKS.
 - : NO PAPER SHOULD BE BROUGHT INTO THE EXAMINATION ROOM.
 - : WRITE NEATLY & CLEARLY
 - : BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

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

Question 1

Define the following terms commonly used in relation to food hygiene;

- | | | |
|----|---------------------------------|-----|
| a) | D-value | [3] |
| b) | HACCP (write in full) | [2] |
| c) | Z-value | [3] |
| d) | Danger Zone of Bacterial Growth | [2] |
| e) | CFU (write in full) | [2] |
| f) | Haloduric | [2] |
| g) | Cryogenic freezing | [2] |
| h) | Fomites | [3] |
| i) | Ambient temperature | [1] |
| j) | High risk foods | [2] |
| k) | Lag phase | [3] |
- [25 Marks]

Question 2

- a) In food processing plants, the main reason for cleaning both processing equipment and processing areas is to remove food debris and other soils which may contain food poisoning or spoilage microbes and thus contaminating the food. Explain therefore the basic stages and sequence of wet cleaning and disinfection in food establishment's equipment and utensils. [10]
- b). Hygiene food standards are required in food establishment
- | | |
|--|-----|
| i) What symptoms are associated with food borne illness? | [3] |
| ii) Name four high risk foods. | [4] |
| iii) What are the main sources of food contamination in the kitchen? | [4] |
| iv) List four occasions when food handlers should wash their hands | [4] |
- [25 Marks]

Question 3

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|---|------|
| a). Explain the linear flow principle in the designing of a food establishment. | [8] |
| b). How do excreta-borne infections contaminate food? | [5] |
| c) Discuss the benefits and shortcomings of chlorine based sanitizer. | [12] |
- [25 Marks]

Question 4

The World Health Organization "WHO" recommends five keys to safer food in the fight against prevention of foodborne diseases in food outlets. List and explain these keys.

[25 Marks]