

**THE TAMIL NADU Dr. M.G.R MEDICAL UNIVERSITY**

[AHS 1022]

**OCTOBER 2022**

**Sub. Code: 1303**

**M.Sc. CLINICAL NUTRITION**

**First Year**

**(Candidates admitted from 2012-2013 onwards – Paper – III)**

**(Candidates admitted from 2020-2021 onwards – Paper – IV)**

**PAPER III & IV - MEDICAL & FOOD MICROBIOLOGY**

*Q.P. Code: 281303*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions**

**I. Elaborate on:**

**(2x20=40)**

1. Give a detailed account on Food borne infections.
2. Explain in detail about the risk analysis and risk management.

**II. Write notes on:**

**(10x6=60)**

1. Discuss about the Spoilage effects of Poultry and poultry products.
2. How to use chemicals to control and destruct microorganisms in foods? Explain.
3. Explain any two factors affecting growth of microorganisms in foods.
4. Describe the role of microorganisms in fermented foods.
5. Etiology, disease conditions, clinical features and prevention of Botulism.
6. Antinutritional factors in foods.
7. Explain the detection methods of adulteration for any 6 food products.
8. Roles and responsibilities of risk communication.
9. Construct a HACCP flow diagram for a liquid milk.
10. Explain the roles of the following organization in the area of standardization of foods.  
a) Codex Alimentarius    b) Codex India?

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