DKM COLLEGE FOR WOMEN AUTONOMOUS

DEPARTMENT OF FOODS AND NUTRITION

FOOD MICROBIOLOGY

Sub code-15CPFN3C **CLASS – II MSC**

UNIT -1 INTRODUCTION TO MICRO-ORGANISMS

6 Mark Questions

1. What are the uses of micro-organisms?
2. How are micro-organisms classified?
3. What are the methods used for classification of micro-organisms?
4. Explain the structure of bacteria
5. Explain the arrangements of bacteria
6. Explain the locomotor organs of bacteria
7. Explain the structures internal to cell wall of bacteria
8. Explain the morphology of yeast cell
9. Explain the morphology of moulds
10. How does fungi reproduce?
11. What is the economic importance of moulds?
12. Explain the economic importance of yeasts.
13. Explain the morphology and classification of algae
14. Explain the reproduction in algae
15. What is the economic importance of algae?
16. Explain the morphology of protozoans
17. Explain the reproduction in protozoans
18. Explain the morphology of viruses
19. Explain the lifecycle of T4 bacteriophages

15 Mark Questions

1. How are micro-organisms classified and explain the methods used for classification?
2. Explain the structure of bacteria in detail
3. Explain the morphology of fungi
4. Explain the morphology and importance of algae
5. Explain the morphology and importance of yeast
6. Explain the morphology and importance of moulds
7. Explain the economic importance of fungi
8. Explain the morphology and reproduction of protozoans
9. Explain the morphology of viruses
10. Explain the lifecycle of T4 bacteriophages

UNIT-II FOOD SPOILAGE

6 Marks Questions

1. What are the general principles in food spoilage?
2. Explain the food fitness and unfitness for consumption
3. Explain the spoilage of perishable foods
4. Explain the spoilage of semi-perishable foods
5. Explain the spoilage of non-perishable foods
6. How will you identify the fitness of fishes
7. Explain the types of hazards

15 Marks Questions

1. Explain the general principles underlying food spoilage.
2. Explain the general food fitness and unfitness.
3. Explain the spoilage of perishable and non-perishable foods.

UNIT III FOOD BORNE DISEASES

6 Marks Questions

1. Write a note on food borne diseases
2. Explain food infection
3. Explain microbial toxins and its types
4. Explain the causative agents, sources and symptoms, prevention of staphylococcal food poisoning.
5. Explain the causative agents, sources and symptoms, prevention of botulism
6. Explain the causative agents, sources and symptoms, prevention of salmonellosis
7. Explain the causative agents, sources and symptoms, prevention of bacillus infection.
8. Explain the causative agents, sources and symptoms, prevention of E.coli food poisoning.
9. Write a note on fungal toxins
10. Explain food intoxication

15 Marks Questions:

1. Explain food borne diseases in detail.
2. Explain food infection and intoxication.
3. Explain the types of bacterial food poisoning in detail
4. Write a note on microbial toxins
5. Write a note on fungal toxins.

UNIT-IV CONTROL OF MICRO-ORGANISMS

6 Marks Questions:

1. Explain the principles of food preservation
2. Write a note on preservation by low temperature

3. Write a note on preservation by high temperature
4. Explain preservation using chemical preservatives
5. Explain preservation using natural preservatives
6. Write a note on ohmic heating
7. Write a note on membrane technology
8. Explain preservation using light energy
9. Explain preservation using sound energy
10. Write a note on hurdle technology
11. Write a note on extrusion technology
12. Explain microwave heating

15 Marks Questions:

1. Write a note on preservation by alteration in temperature
2. Explain chemical preservation in detail
3. Explain natural preservatives in detail
4. Explain the new trends in preservation.
5. Explain the principles of food preservation

UNIT-V MICROBIOLOGICAL TESTING

6 Marks Questions:

1. Write a note on dry heat sterilization
2. Write a note on moist heat sterilization
3. Write a note on fractional sterilization
4. Explain pasteurization and its types
5. Explain chemical sterilization
6. Write a note on filtration and its types
7. Explain the microbiology of water
8. What are the organisms found in water?
9. Explain the various types of bacterial examination of water
10. Explain the E.coli examination of water

11. Explain water treatment
12. Write a note on aquatic fungi
13. Write a note on total bacterial count
14. Write a note on tests for enterococci
15. Write a note on tests for clostridium welchii
16. Write a note on disinfection for purification of water

15 Marks Questions

1. Explain sterilization by application of heat
2. Explain disinfectants
3. Explain the microbiology of water and its organisms
4. Write a note on bacterial examination of water
5. Explain water treatment in detail