

KANYASHREE UNIVERSITY

M.Sc. 2nd Semester Examination-2023

Subject: Food & Nutrition

Course-CC 7

Food Microbiology and Food Toxicology

Full Marks-40

Time-2.00 Hours

Group A

[Answer **any four** of the following]

(5×4=20)

1. What is pure culture? Differentiate between streak plate method and pour plate method. What is acid-fast staining? (1+3+1)
2. Write a short note on Food Adulteration. (5)
3. Differentiate between sterilization and disinfection. How will you use radiation as a measure of sterilization-explain? (2+3)
4. What do you mean by probiotics? What do you mean by fermentation? Name three Indian traditional fermented foods and their beneficial effects. (1+1+3)
5. Classify bacteria on the basis of the mode of nutrition. What is enterotoxin, endotoxin and exotoxin? Give examples. (2+3)
6. Discuss briefly Food borne illness caused by *Escherichia coli*. (5)
7. Write a short note on heavy metal toxicity. (5)

Group B

[Answer **any two** of the following]

(10×2=20)

1. What do you mean by food spoilage? Briefly describe the microorganisms involved in the spoilage of milk, fruits, meat and canned foods. (2+8)
2. Classify and give examples of bacteria on the basis of their shape, temperature requirement, oxygen requirement and pH of their growth medium. Briefly discuss bacterial growth curve. (5+5)
3. What is HACCP? What are the principles of HACCP? What do you mean by food adulteration? (2+6+2)
4. What is water activity? What are the different kinds of microorganisms present in drinking water? Why we use Durham's tube in the detection of the microorganisms in drinking water? What are the household techniques used for the purification of the water? (2+3+2+3)
