

Food Science and Nutrition (P.G.)

[CBCS]

M.Sc. Second Semester End Examination-2024

(Regular & Supplementary Paper)

PAPER-MFSN 203

[Advance and Industrial food microbiology]

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group A

- 1. Answer any five questions of the following: 5x2= 10**
- a. Write the criteria of a good strain.
 - b. What is crude media? Write its advantage.
 - c. Give two industrial important bacteria's.
 - d. Write the name of chain forming and cluster forming bacteria.
 - e. What is growth yields?
 - f. Why oxygen is toxic for anaerobic bacteria?
 - g. What are the benefits of fermented foods?
 - h. What is Pure culture technique?

(2)

Group B

2. Answer any four questions of the following: **4x5= 20**
- a. What is solid state fermentation? Write its advantage and disadvantage. **2+3**
 - b. Differentiate between submerged and surface fermentation. Write the factor affecting the microbial growth. **3+2**
 - c. What are the factors affecting selection of food industrial important of microorganism. **5**
 - d. Write the process of pure culture to obtain the single species from a mixed culture. **5**
 - e. What is GMO? Write the process to obtain the Golden rice. **1+4**
 - f. Write the nutritional importance of fermented food. Classify the fermented food and give example each types. **2+3**

Group C

3. Answer any one question of the following: **1x10=10**
- a. What is orient food? What is pickling? Write the traditional method to prepare the pickle with asociated microorganism. What is homotropic and heterotropic fermentation. **1+2+5+2**
 - b. Write the biosynthesis of pericillin with methods of purification. Write the basic principle of food spoilage. Write the objectives of food preservation. **6+2+2**
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