

Food Science and Nutrition (P.G.)

[CBCS]

M.Sc. Second Semester End Examination-2024

(Regular & Supplementary Paper)

PAPER-MFSN 202

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**
- What is Scintillator?
 - Write any two features of an ideal primer.
 - What do you mean by secondary metabolite?
 - Write the names of any four detectors used in HPLC.
 - Why fresh meat is bright red but non-fresh meat is brown or pale colour?
 - Why wooden strips are used for fruits and vegetable packaging
 - What do you mean by CLIA and FIA?
 - What do you mean by Rf value?

Group B

- 2. Answer any four questions of the following: 4x5= 20**
- a. Describe the process of specific antibody separation by affinity chromatography. 5
 - b. State the standard root of GMP followed food industry. 5
 - c. What is nanosensor packaging? Describe CAP for food storage and transport. 2+3
 - d. Write the difference between hygiene and sanitation. State the importance of personal hygiene and food handling habits in food safety. $2\frac{1}{2} + 2\frac{1}{2}$
 - e. Describe about the QACs with their advantages and disadvantages. 5
 - f. Discuss the sanitary consideration and sanitary evaluation of food plants. 3+2

Group C

- 3. Answer any one question of the following: 1x10=10**
- a. Describe the principle and working procedure of Scintillation counter. State the difference between isocratic and analytical HPLC. 2+5+3
 - b. Discuss the principle and procedure of calcium quantification in fruit juice. What is chromatographic finger printing? 2+6+2
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