Bachelor of Science (S.Y.B.Sc.) Third Semester

# B.Sc. 2362 - Microbiology : Paper-II (Industrial and Food Microbiology)

P. Pages : 2 **GUG/W/18/1273**

Time : Three Hours * 0 9 8 6 * Max. Marks : 50

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**1.** Explain primary screening in detail. **10**

**OR**

Explain production of citric acid in detail. **10**

**2.** Describe the production of cottage cheese with flow sheet diagram. **10**

**OR**

Discuss the different methods of food preservation. **10**

**3.** a) Explain methods of strain development. **2½**

b) Explain industrial production of lysine. **2½**

c) Discuss the different sources of microorganism in milk. **2½**

d) Explain the concept of HACCP. **2½**

**OR**

e) Add a note on batch fermentor. **2½**

f) Write in brief about ethanol production. **2½**

g) Explain phosphatase test to determine pasteurization of Milk. **2½**

h) Discuss factors responsible for food spoilage. **2½**

**4.** a) Write a note on inoculum build up. **2½**

b) Draw the flow sheet diagram of penicillin production. **2½**

c) Explain MBKT method for quality testing of milk. **2½**

d) Discuss preservation of food by high and low temperature methods. **2½**

**OR**

e) Draw a well labelled diagram of fermenter. **2½**

f) Write about Raw material/fermentation media for Baker's yeast production. **2½**

g) Describe methods of pasteurization. **2½**

h) Discuss the microbiology of Idli fermentation. **2½**

**5.** Attempt **any ten.**

a) What is monoculture fermentation? **1**

b) What is Impeller and write its use. **1**

c) Name any two nitrogenous raw materials. **1**

d) Give example of top fermenting and bottom fermenting yeast. **1**

e) What are types of beer? **1**

f) Write the application of citric acid. **1**

g) What is acid curd cheese? **1**

h) Give the composition of Milk. **1**

i) What is the principle of Resazurin test? **1**

j) Give example of chemical food preservatives. **1**

k) What is food poisoning and food infection? **1**

l) What is Putrefaction and Rancidity? **1**

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