

B.Sc. (CBCS Pattern) Semester-III
USMBT06 - Microbiology Paper-II - Food Soil Microbiology and Microbial Ecology

P. Pages : 2

Time : Three Hours



GUG/W/24/11615(S)

Max. Marks : 50

1. What is Food Spoilage? Discuss different types of spoilage with suitable example. **10**

OR

a) Write about sources of contamination in food. **2½**

b) Write a short note on physical methods of food preservation. **2½**

c) Write a brief account on food borne diseases. **2½**

d) Write a short note on microbial examination of food. **2½**

2. What is compost? Discuss aerobic method of composting in detail. **10**

OR

a) Write a note on anaerobic composting. **2½**

b) Describe characteristics of Humus. **2½**

c) Write a note on composition of soil. **2½**

d) Write a note on phosphorus cycle. **2½**

3. What is negative association? Discuss parasitism in detail. **10**

OR

a) Write a note on commensalism. **2½**

b) Give a brief account on non-symbiotic N₂-fixation. **2½**

c) Write a note on synergism. **2½**

d) Give an account on biopesticides. **2½**

4. Discuss in detail about construction and working of Biogas Plant. **10**

OR

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| a) Write a note on bioremediation. | 2½ |
| b) Give a brief account on bioleaching of copper. | 2½ |
| c) Write a note on acid mine drainage. | 2½ |
| d) Discuss biodegradation of pesticides in brief. | 2½ |

5. Solve any ten (1m each)

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| a) Write any two food borne diseases. | 1 |
| b) What is HACCP? | 1 |
| c) What is Food-Poisoning? | 1 |
| d) Write the names for any two types of soil. | 1 |
| e) What is Humus? | 1 |
| f) Which biogeochemical cycle is completely sedimentary? | 1 |
| g) What is antibiosis? | 1 |
| h) What are biofertilizers? | 1 |
| i) Write the names of any free living N ₂ -fixing bacteria. | 1 |
| j) What is bioleaching? | 1 |
| k) What is MEOR? | 1 |
| l) What is desulfurization of coal? | 1 |
