

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)

CLASS: IMSC  
BRANCH: FT

SEMESTER : VII  
SESSION : MO/18

SUBJECT: SAF1001-ADVANCED FOOD MICROBIOLOGY

TIME: 03:00

FULL MARKS: 60

**INSTRUCTIONS:**

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
  2. Candidates may attempt any 5 questions maximum of 60 marks.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
- 

- Q.1(a) Discuss the factors affecting microbial growth in food. [6]  
(b) What is Spoilage? Discuss in detail the spoilage of milk and milk products, the factors involved and the remedies. [6]
- Q.2(a) What meant by preservation of food? Discuss the physical methods of food preservation. [6]  
(b) Briefly describe the role of chemicals in the food preservation. [6]
- Q.3(a) What are the chemical changes in food brought about by the microbes? [6]  
(b) Discuss the various types of interaction between the microorganisms with examples. [6]
- Q.4(a) What do you mean by food poisoning? Discuss the factors involved in food poisoning. [6]  
(b) What are microbial toxins and their mode of action? [6]
- Q.5(a) What do you mean by food hygiene and sanitation? What are the preventive measures for food contamination. [6]  
(b) Discuss any two rapid methods in detection of microorganisms. [6]
- Q.6(a) Discuss some of the traditional fermented foods of India. [6]  
(b) Give a vivid account of the fermented foods based on milk. [6]
- Q.7(a) What do you mean by Bio-burden? Give the advantages of routine bioburden analysis. [6]  
(b) Discuss the different methods for storage of microbial cultures. [6]

\*\*\*\*\*26.11.18\*\*\*\*\*M