

6. (a) Write short notes on the following (any two) :

(i) MPN

(ii) Principles of HACCP

(iii) Limulus lysate test (4×2=8)

(b) Name the biosafety risk group to which *Mycobacterium tuberculosis* and *Staphylococcus aureus* belong. (1+1=2)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 369

J

Unique Paper Code : 32533931

Name of the Paper : Microbial Quality Control in Food and Pharmaceutical Industries

Name of the Course : B. Sc. (Hons.) Microbiology

Scheme/Mode of Examination: CBCS (LOCF), Part – II

Semester : IV

Duration : 2 Hours

Maximum Marks : 50

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. All questions carry equal marks.
3. Attempt any five questions.

1. (a) Expand the following (**any four**) : (1×4=4)

(i) FSSAI

(ii) SOP

(iii) ISO

(iv) HEPA

(v) BIS

(b) Briefly discuss any two rapid detection methods used to ascertain the microbial quality of milk. (6)

2. (a) What do you understand by good laboratory practices? Comment on the proper method of disposing of biohazard waste. (4+3=7)

(b) What is the importance of serial dilution in standard plate counts? (3)

3. Define the following (**any five**) : (2×5=10)

(i) Biohazard

(ii) Pyrogen

(iii) Biosensor

(iv) Incineration

(v) Critical limit

(vi) Disinfection

4. (a) Differentiate between BSL-2 and BSL-3. (4)

(b) Discuss any two media that are both selective and differential. (6)

5. (a) Briefly describe two methods for PCR-based detection of food pathogens. (6)

(b) Mention BIS standards for pasteurized milk and potable water. (4)