JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2023

B. Tech-III Semester (BI)

COURSE CODE (CREDITS): 18B11BI312

MAX. MARKS: 15

COURSE NAME: MICROBIOLOGY & IMMUNE SYSTEM

COURSE INSTRUCTORS: Dr. Rahul Shrivastava

MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

(b)Marks are indicated against each question in square brackets.

(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems. (d) Calculators are NOT allowed

Q1. You have isolated a new bacterium from hot spring region of Himachal Pradesh. Design an experiment to study the amino acid requirements of the unknown bacteria. (CO-I) [4]

Q2. Calculate the CFU of the bacteria present in each soil sample from the following data: (CO-V) [3]

Sample No.	Dilution Factor	No. of colonies
Sample 1	-4	48, 60
Sample 2	-6	54, 78

Q3. Draw labeled diagram of a typical bacterial cell, and describe functions of its important components

(CO-I) [4]

Q4. Discuss Koch's postulates with suitable diagrams; discuss its significance in the development of medical microbiology.

(CO-II) [4]