

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS-2022

B. Tech. -IV Semester (BT)

COURSE CODE: 18B11BT414

MAX. MARKS: 25

COURSE NAME: MICROBIOLOGY

COURSE CREDITS: 3

MAX. TIME: 1 Hour 30 Min

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Section I

Q1. Very Short answer type questions. Each question carries one mark.

- A) The microbicidal agents that inhibit the growth of microbes without killing them are known as _____. COII
- B) Sulfonamides are the antibiotics that control the microbial growth by inhibiting the _____. COII
- C) Among the Gram+ve and Gram-ve bacteria Penicillin G is more effective against _____. COIV
- D) The antibiotic sensitivity testing is useful to determine the epidemiology of a region. Explain with reason. COIII
- E) Alcohols are the intermediate level germicidal agent and these can kill the microbes. What is the mode of action of alcohol on the living cell of microbes? COII

Section II

Q 2 Classify the various chemical agents on the basis of their level of decontamination. Give example for each class. 3 marks COIII

Q 3 Discuss the various factors that affect the death rate of microorganisms during the treatment using germicidal agents. 3 marks COIII

Q 4 Temperature is one of the important factors that affect the growth pattern in microbes. How the high and low temperature based methods have been employed for killing the microorganisms? 3 marks COIV

Q 5 In order to sterilize the inanimate objects radiations are the method of choice for sterilization. Discuss the various radiation based methods to control microbial growth. 3 marks COIV

Section III

Q 6 How the antimicrobial resistance develop in the microorganisms and what are its harmful effects on the ecosystem. 4 marks COIII and COIV

Q 7 Describe the virus mediated transfer of genes in the microorganisms. Explain the lytic and lysogenic cycle during viral infection. 4 marks COIV