

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

B.Tech.-VI Semester (BT/BI)

COURSE CODE (CREDITS):18B1WBT632 (3)

MAX. MARKS: 15

COURSE NAME: INFECTIOUS DISEASES

COURSE INSTRUCTORS: Dr. Gopal Singh Bisht

MAX. TIME: 1 Hour

**Note:** (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q. No	Question	CO	Marks
Q1	Assess the effectiveness of different intervention strategies to control an outbreak of bacterial infections.	COI	3
Q2	Compare and contrast between Endotoxin and Exotoxin. Analyze the biochemical process by which toxoids are synthesized from Exotoxins. Endotoxin, although strongly antigenic, cannot be converted to toxoids. Comment on it.	COII	3
Q3	Why do microbes form Biofilm, and what advantages do they gain from this mode of growth? Describe the stages of biofilm formation.	COI	2
Q4	Explain the pathophysiological mechanisms involved in sepsis syndrome, highlighting the role of the immune response, inflammatory mediators, and organ dysfunction.	COII	2
Q5	Analyze the key causes of increasing antimicrobial resistance (AMR). Design strategies that can be implemented to mitigate its spread at the individual and global levels? Evaluate the clinical and laboratory criteria used to differentiate bacterial infections from viral infections.	COV	5