

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATIONS-2022

B.Tech-VI Semester (BT)

COURSE CODE (CREDITS): 18B1WBT632

MAX. MARKS: 35

COURSE NAME: INFECTIOUS DISEASES

COURSE INSTRUCTORS: DR. GOPAL SINGH BISHT

MAX. TIME: 2 Hours

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

- Q1a) How the following factors affect susceptibility to malaria? [3][COIV]
a) Surface proteins on red blood cells
b) Cytoskeleton defects in red blood cells
c) Hemoglobinopathies
d) Low-level immunity of host
- Q1b) Which form of malaria is the most dangerous, and why? Explain life cycle of malaria parasite with diagram. [5][COIII]
- Q1c) How latent TB is different from active TB. Which drugs are used to treat TB? [2][COV]
- Q1d) Why to study infectious disease epidemiology? Explain Zoonosis, epizootic and Enzootic infections. [3][COI]
- Q2 Understanding life cycle of human immunodeficiency virus is crucial for designing anti HIV drugs. Explain the statement by taking examples of different anti HIV drugs. [5][COV]
- Q3. Comment on role of Hemagglutinin (HA) and neuraminidase (NA) in influenza virus. Draw and explain replication of influenza virus. [4][COIII]
- Q4. If humans have a high level of innate immunity to fungi, how fungal infection does develops. How to control mycotic infections? [3][COIV]
- Q5. Discuss the mechanisms by which microorganism develop resistance to antimicrobial drugs, and the origins and clinical implications of such resistance. [4][COV]
- Q6. What is the preferred test for diagnosis of HIV, and how is AIDS defined? What is the CD4 count below which the host begins to experience opportunistic infections? [3][COIV]
- Q7. In case of dengue the first infection cause mostly minor disease, but secondary infections has been reported to cause severe diseases (DHF or DSS) in both children and adults. Explain why? [3][COIII]