## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -3 EXAMINATION- May 2023

B.Tech. (Biotechnology)

COURSE CODE (CREDITS): 18B1WBT632, (3)

MAX. MARKS: 35

**COURSE NAME: Infectious diseases** 

COURSE INSTRUCTOR: Dr. Gopal S. Bisht

MAX. TIME: 2.0Hrs

Note: All questions are compulsory. Marks for each question are given in brackets.

Q1a).Explain different methods used for diagnosis of Mycobacterium tuberculosis [4 Marks COIV]

- b). Why it is difficult to manage the 'Latent TB infection (LTBI)' as compared to 'active TB disease'?

  [4 Marks, COIV]
- Q2a). How do you differentiate between 'Acute hepatitis' and Chronic hepatitis'? [4 Marks, COIV]
- b). A virus is associated with acute hepatitis; get spreads by the fecal-oral route and infections often occur in conditions of poor sanitation. Define this virus and explain the mode of its transmission.

  [4 Marks, COV]
- Q3. Explain the clinical presentations of malarial disease and define the 'Sporogony' and 'Schizogony' phases of malaria parasite.

  [4 Marks, COIII]
- Q4. Explain the events of immunological deprivation during 'Acquired Immunodeficiency Syndrome'. Define role of its causative organism and its life cycle in human host. [5 Marks, COVI
- Q5. Design a methodology to estimate the minimal inhibitory concentration (MIC) and minimal bactericidal concentration (MBC) for a pathogenic bacterium. [5 Marks, COV]
- Q6. A contagious respiratory illness is caused by a group of RNA viruses which can cause mild to severe illness, and at times can lead to death. Identify the virus; also explain the different variant of virus and mode of their transmission.

  [5 Marks, COV]