Dr. Harish Changotra

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT END SEMESTER EXAMINATION-2015

BTech VIII Semester, BT/BI

COURSE CODE: 15B1WBT839 MAX. MARKS: 45 COURSE NAME: Infectious Diseases **COURSE CREDITS: 03** MAX. TIME 3 HRS Note: All questions are compulsory. Section A 9 marks) 1. Define antigenic shift and antigenic drift. 2. Differentiate chronic and acute infection with examples. 3. What are endotoxins and exotoxins? Give examples 4. How HCV transmission takes place? 5. Name virus that results in severe disease if encountered second time. 6. Name various Plasmodium species infecting humans 7. What are various tests for diagnosis of HIV infection 8. Name various agents that transmit dengue virus 9. Define chemotherapeutic index. Section B (13.5 marks) 1. Identify a virus that causes jaundice fransmitted via fecal-oral route, carry positive strand RNA with average incubation period of 30 days. Discuss detailed replication strategy used by this virus. (5) 2. Describe life cycle of dengue virus. (3) 3. Acyclovir is an antiviral drug. What is its mechanism of action? (3) 4. What are symptoms of Dengue Haemorrhagic fever and Dengue Shock Syndrome? (2.5) Section C (22.5 marks) 1. What are various factors responsible for transmission of a disease? (3) 2. Describe generalized replication strategy used by viruses. What are various steps that could be targeted to block viral replication, discuss with examples. (5)3. Give detailed description of different mechanisms of action of anti-bacterial drugs. (6) 4. Draw structure of HIV. (5)5. Discuss symptoms, transmission and diagnosis of HCV infection. (3.5)