

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST 2 EXAMINATIONS - DECEMBER 2017

B.Tech V Semester (BT/BI)

COURSE CODE: 10B11BT514

MAX. MARKS: 35

COURSE NAME: IMMUNOLOGY

COURSE CREDITS: 04

MAX. TIME: 2.0 HRS

*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

1. What are cytokines? Discuss their properties. 2
2. Write a note on cytokine antagonists. 2
3. Define antigenic drift and antigenic shift. 2
4. What are advantages and disadvantages of attenuated viral/bacterial vaccines? 2
5. Describe the sequence of events in the B cell activation by a thymus dependent antigen. 3
6. Discuss various mechanisms of immunological tolerance. 3
7. Describe various immune evasion strategies of parasites. 3
8. What are recombinant vector vaccines? 3
9. "All the three pathways of complement activation converge at C3 convertase" justify this statement. 5
10. What is type I hypersensitivity? Describe its various components and mechanism. 5
11. What are various criteria for characterizing a disease as an autoimmune disease? Describe mechanisms of autoimmunity. 5