Dr Harish

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST-2 EXAMINATION - OCTOBER 2018

## B.Tech (Biotechnology) Semester V

COURSE CODE: 10B11BT514 MAX. MARKS: 25

COURSE NAME: IMMUNOLOGY

COURSE CREDITS: 04 MAX. TIME: 1.5 HRS

*Note:* All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means. Marks are indicated against each question in brackets.

1.	Discuss radioimmune assay and its applications.	2
2.	What are biological functions of antibodies?	2
3.	What is cross-reactivity? Explain with examples.	2
4.	What do you understand by passive agglutination?	2
5.	Explain Tonegawa and Hozumi's model to demonstrate that immunoglobulins gene	s
	rearrange during B cell development.	2
6.	Describe various mechanisms of generation of antibody diversity.	5
7.	What are differences between Class I and Class II MHC molecules? Explain its role	e in
	disease susceptibility.	5
8.	Give experimental demonstration of followings:	5
	a. Antigen processing is required for recognition by T-cells.	
	b. Evidence for existence of two antigen processing and presentation pathways.	