D 91048	(Pages : 2)	Name
		Reg. No
FIFTH SEMESTER B.Sc.	DEGREE EXAMINAT	TION, NOVEMBER 2015
	(UG—CCSS)	
(Core Course—Biotechnology	,
BT 5B 02—IMMU	JNOLOGY AND IMMUNO	OTECHNOLOGY
Time: Three Hours		Maximum: 30 Weightage
I. Objective Type Questions. Ans	swer all questions:	
A. True or False:		
1 Antibody mediated immui	ne responses are termed hum	noral responses.
2 GALT is a primary lympho	oid tissue.	
3 NK cells are cytoloxic cells	3 .	
4 Opsonization greatly increase	ases the efficiency of phagocy	rtosis.
5 Dendritic cells are antiger	presenting cells.	
6 Type II hypersensitivity is	also known as immediate hy	ypersensitivity.
B. Name the following:		
7 Antigen that can generate	an immune response.	
8 The most abundant immu	inoglobulin in the serum.	
9 The immunoglobulin that	can cross the placenta.	
10 Name one recombinant va	accine.	
11 Name an immunosuppres	ssive drug.	
12 Name one organ specific a	auto-immune disease.	
		(12 x = 3 weightage)
II. Short Answer Type Questions	. Answer all <i>nine</i> questions :	
12 What is Saraama?	14 What is once	mization 2

13 What is Sarcoma? 14 What is opsonization?

15 What are adjuvants? 16 What are CD markers?

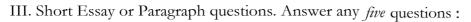
17 What are interferons? 18 Grave's disease.

19 Bombay group. 20 Haptens.

21 TNF a.

 $(9 \times 1 = 9 \text{ weightage})$

Turn over



- 22 Immunologic tolerance.
- 23 Western blotting.
- 24 Immunoglobulin superfamily.
- 25 Tumor induction.
- 26 Cancer immunotherapy.
- 27 Recombinant vector vaccine production.
- 28 Organ specific auto-immunity.

 $(5 \times 2 = 10 \text{ weighta})$

IV. Essay Questions. Answer any two questions:

- 29 Write an essay on different classes of immunoglobulin.
- 30 What is adaptive immunity? Explain the general properties of adaptive immunity.
- 31 Explain how antigen presenting cells act?

 $(2 \times 4 = 8 \text{ weightage})$