#### Section - C

#### **ANSWER ANY THREE**

(3X10=30)

- 16. Describe the structure , characteristics and functions of immunoglobulin and its types
- 17. Outline the events of complement classical and alternative pathway
- 18. Give a detailed account on organ specific autoimmune disease
- 19. Explain in detailed about the production of monoclonal antibodies and its applications
- 20. Outline the principle and technique of ELISA and ELISPOT.

16.11.19/FN

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## DHANALAKSHMI SRINIVASAN COLLEGE OF ARTS & SCIENCE FOR WOMEN (AUTONOMOUS)



(For Candidates admitted from 2018-2019 onwards)

# P.G DEGREE EXAMINATIONS, NOVEMBER - 2019

Time: 3 hrs Max. Marks: 75

M.Sc., Biochemistry

# Advanced Immunology

### Section-A

#### **CHOOSE THE CORRECT ANSWER** $(10 \times 1 = 10)$

- 1. The major class of Ab produced by bone marrow is
  - (a) IgA
- (b) IgM
- (c) IgG
- (d) IgE

- 2. The peripheral blood has high proportion
  - (a)T-cell
- (b) B-cell
- (c) macrophages
- (d) plasma cells
- 3. The initial complement component that is bound by complement-fixing antibodies is
  - (a) C1q
- (b) C1s
- (c) C5a
- (d) C3a

- 4. The immature macrophage is
- (a) Histocyte (b) kupffer cell (c) microglia (d) monocytes
- 5. An example of a known oncogenic virus is:
  - (a) Herpes zoster
- (b) HIV-2.
- (c) Epstein-Barr virus.
- (d) Vesicular stomatitis virus

(a) CD1 (b) (	CCR5	(c) CD8	(d) CD36								
7. MAbs generated against Ok	CT-3 Ag is	used									
(a) to suppress the transplant rejection											
(b) to detect cancer											
(c) to detect affinity of certain Ag to Ab											
(d) to detect venereal disease caused by nisseriagonorrhea											
8. HGPRT mutant myelomas can be selected by growing myeloma cells in											
IMDM medium containing											
(a) 8-azaguanine	(b) 5-t	romouracil									
(c) aminopterin	(d) hyd	rofluoric aci	id								
9. The fluorescent dye FITC Absorbs Uv light and remits											
(a) Yellow light	(b) Blu	ie light									
(c) green light	(d) Uv	light.									
10. The major type of bonds between Ag and Ab is											
(a) H-bond (b) covalent bond											
(c) hydrophobic bond	(d) vand	er waals bon	d								
	Section -	- B									
ANSWER ALL THE QUESTIONS (5X7=35)											
11. (a) Explain the various cytokines of the immune system											
(OR)											
(b) Describe the characteristics of innate immunity.											

6. HIV initially infects cells expressing

12. (a) Elaborate antibody diversity.

(OR)

- (b)Differentiate T Cell and B Cell with neat diagram
- 13.(a).Discuss the mechanism ,diagnosis and treatment of type I hypersensitivity

(OR)

- (b). Give an account on different types of tumour antigens
- 14.(a) What are attenuated vaccines? Give two examples of attenuated vaccine

(OR)

- (b) Explain in detail about active and passive immunization
- 15.(a). Give an account on immunoelectroporesis and its applications (OR)
  - (b). Briefly explain about Abzymes and its uses