



1) Which of the following is not function of antibodies

- a- Neutralize of microbes and their toxins
- b- Bind and block binding of microbe to cells
- c- Inhibit spread of microbes from infected cell to another.
- d- Block binding toxin and increase its pathologic actions

2) Which of the following antibodies responsible for opsonization

- a- Tc
- b- Th
- c- IgG
- d- IgA
- e- IgE

3) What is meant by antibody dependent cellular cytotoxicity?

- a- Antibody block and bind to microbes
- b- Antibody attach by fab and fc to NKs
- c- IgG attach by fc part to parasites and by fab to eosinophils
- d- IgA activate eosinophils to release granules and kill parasites

4) Which of the following is responsible for mucosal immunity?

- a. Tc
- b. Th
- c. IgG
- d. IgA
- e. IgE

1	2	3	4
C	B	C	D



4) Which of the following antibodies can cross placenta?

- a) IgM
- b) IgD
- c) IgG
- d) IgA
- e) IgE

5) Which of the following is not considered MALT?

- a) GIT
- b) Respiratory system
- c) Epidermis
- d) Urogenital system

6) Which of the following is responsible for primary immune response ?

- a. IgM
- b. IgD
- c. IgG
- d. IgA
- e. IgE

7) Primary immune response is characterized by the following except?

- a) Rapid in onset
- b) Low in magnitude
- c) Short live
- d) IgM
- e) During this response some lymphocytes become memory cells.

5	6	7	8
C	C	A	A





9) Which of the following cytokines lead to Th1?

- a) IL 1
- b) IL 12
- c) IL 15
- d) IL 4
- e) IL 5

10) Which of the following cluster differentiation present on Th cells

- a) CD8
- b) CD6
- c) CD19
- d) CD 21
- e) CD4

11) Which of the following interleukins produced by Th2 cells?

- a) IL 1,5
- b) IL 4,5
- c) IL 15
- d) IL 12
- e) IL 6

12) What is the function of Th2 cells?

- a) Secrete IL1 to stimulate acute inflammatory reaction
- b) Secrete IL5 in cases of viral infection
- c) Secrete IL4 in cases of helminthic infection
- d) Secrete IL12 to help T cytotoxic cells.

9	10	11	12
B	E	B	C



13) Which cytokine is essential for T-cell activation to release their granzymes?

- a. IL 1
- b. IL 2
- c. IL 15
- d. IL 4
- e. IL 5

14) The interaction of which molecule on the membrane of cells with its ligand correspond 1st signal in activation of T cells?

- a- Interaction between MHC and B7 Molecule
- b- Interaction Of B7 molecule to CD 24
- c- Interaction between B7 molecule on APCs with CD28 on T cells
- d- Interaction of TCR- CD3 with peptides on MHC.
- e- Activation of Th2 to secrete IL4 and IL5

15) Which of the following has role in Ag presentation to Tc?

- a- MHC class III
- b- MHC class I
- c- MHC class II
- d- HLA - DR
- e- HLA -DQ

16) Which of the following is true about MHC class II

- a- It is formed of 4 polypeptide chains
- b- Present antigen to CD8 T cells
- c- Is expressed on APCs cells only
- d- Alpha1 and alpha2 domain form the cleft or groove which bind peptide

13	14	15	16
B	D	B	C





17) Regarding steps of killing by CD8 T Cells , what the factor that activate T cells to release their granules?

- a) IL 4 and interferon
- b) IL12 and IL1
- c) IL2 and interferon
- d) Perforin can kill target cells by apoptosis

17
C

WRITTEN QUESTIONS:

1) Enumerate steps of killing of infected cells by CD8 T cells

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2) Mention signals that required for activation of T cells.

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3) Compare between primary and secondary immune response.

<u>Primary</u>	<u>Secondary</u>
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4) Mention the mechanism of antibody role in ADCC

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5) What is the role of interleukins in Differentiation and activation of T cells?

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6) Illustrate structure and functions of class I, II MHC.

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