MID IMMUNO 2019

### Dr-2017

## Dr ANAS (40 QUESTION)

#### 1) Which of the following Antibodies occurs as a pentameric structure?

A) IgM	<mark>B)</mark> IgG
C) IgA	D) IgE

E) A+C

#### 2) Wrong about neutrophils

- A) it is stimulated by G-CSF
- B) It has short half-life with only few hours
- C) it is part of the mononuclear phagocytic system
- **D)** mainly found in the blood and migrate to tissues following inflammation

#### 3) Which of the following best activate NAÏVE CD8 lymphocytes

- A) Conventional Dendritic cells B) Plasmacytoid Dendritic cells
- C) Macrophages D) B cells

#### 4)Which of the following regulators inhibits TCC convertase

A) CD14 B) CD59

C) FH	D) CD46
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5) When we inhibit alternative pathway convertase, all of the following would decrease EXCEPT

A) C3a	<mark>B)</mark> C5a
<mark>C)</mark> C4b2b	D) C3b

E) MAC or TCC

6) which of the following is wrong about innate immune system

- A) it is existed in Plants
- **B)** Very ancient form of immunity
- C) it takes days to weeks to perform its function

7) which of the following cells will be the last cell to perform its function in skin pathogen invasion

- A) Natural killer cells B) Naïve CD8 Lymphocytes
- C) Interepithelial Lymphocytes D) Macrophages

8) You inject a mouse with an antigen that it has never been exposed to it before, the injection takes place at week 0, at week 4 you inject the same mouse with the same foreign antigen, choose the right statement

- A) IgM starts to appear after 2-3 days of week 0
- B) IgM starts to appear after 2-3 weeks after week 4
- C) IgM starts to appear after 2 weeks of week 0

- D) IgG appears before IgM
- E) IgM aren't produced in week 4

9) which of the following initiates the classical pathway of the complement system

- A) C1q B) C1r
- C) C1s D) C3b

10) which of the following Receptors is not found as membrane bound or endothelial bound receptors in MACROPHAGES

A) Toll like receptors 3	B) Toll like receptors 4
C) Nod like receptors	D) Scavenger receptors

E) IL-1 receptor

11) Endothelial cells expresses glycoprotein that binds with low affinity to WBCs and helps in their recruitment from blood to tissues

A) P-Selectin	<b>B)</b> Intracellular adhesion molecule
C) Sialyl lewis X	D) leukocyte function associated antigen 1

12) large family of molecules that stimulate leukocyte movement and regulate the migration of leukocytes from the blood to tissues and all of which are 8- to 12-kD polypeptides, this definition best describes ?

A) Antimicrobial peptide B) chemokines

C) Complement system

13) CD4 in secondary lymphoid organs that has not been exposed to its antigen yet is called?

- A) Naïve immature T helper cell
- **B)** Naïve mature T cytotoxic
- C) Naïve Mature T helper cell
- D) Activated Mature T helper cell

#### 14) Wrong about antigen interaction with lymphocytes

- A) Soluble antigens recognized by B lymphocytes
- **B)** Soluble antigens on macrophages are recognized by T cells
- C) soluble antigens are recognized by T cells

#### 15) Which of the following is a soluble pattern recognition receptor

A) Carbohydrate receptors	<b>B)</b> RIG like receptors
C) Pentraxin 3	D) Toll like receptor 3

#### 16) which of the following increases by 1000 fold in inflammation

- A) Albumin B) C-reactive protein
- C) Inflammasome

#### 17) which of the following is a Pathogen associated molecular pattern

- A) Double stranded Viral RNA B) LPS
- C) HMGb1 (High mobility group box 1) D) peptidoglycan

#### 18) the best sequence of inflammasome formation is

A) Inflammasome formation --- cleavage of caspas 1 --- cleavage of Pro IL-1

- **B)** Inflammasome formation--- cleavage of Pro IL-1 --- cleavage of caspas 1
- C) Cleavage of Pro IL-1 --- inflammasome formation--- cleavage of caspas1
- D) Inflammasome formation --- cleavage of caspas 8 --- cleavage of Pro IL-1

**19)** Which of the following provides antiviral state to cells

- A) IL-1 B) IL-6
- C) IL-8 D) TNF
- E) INF-G

20) Which of the following is least important in fighting extracellular pathogen

A) MacrophageB) B cellsC) CD8 lymphocyteD) CD4 lymphocyte

21)A medical student wants to perform a study on MACROPHAGES type 1, the best way to get these cells is by

- A) collect monocytes from the blood and stimulate them with IL-10
- **B)** collect lymphocyte from the blood and stimulate them with IFN and LPS
- C) collect monocytes from the blood and stimulate them with IFN and LPS
- D) collect hematopoietic cells from bone marrow

22) which of the following is a transcriptional factor for immune genes

- A) Myd88 B) CD14
- C) NF-KB

23) which of the following is not in LPS recognition pathway

- A) CD14 B) MD2
- C) MYD88 D) CD46

24)Which of the following clear Viral infected cells that doesn't exhibit MHC-1

A) CD8 lymphocyte	B) Dendritic cells
C) Natural killer cells	D) B cells

25) long statements about Kidney transplant that has been rejected within minutes, choose the wrong statement

- A) this type of rejection is called hyperacute rejection
- **B)** Complement system activation plays a role here
- C) antigen presenting cells of the donor plays a role here
- **D)** preformed Antibodies in the recipient attack transplanted organ
- E) blood clots are formed which prevents blood supply from reaching the graft

26) Which of the following molecules works as chemokines

- A) IL-1 B) IL-6
- C) IL-8 D) CD46

#### E) TNF

#### 27) All of the following are actions of IL-1 EXCEPT

- A) proliferation of WBCs
- **B)** Migration of WBCs to the site of inflammation
- C) inflammatory response
- D) Decrease the permeability of the blood vessels

#### 28) which of the following is wrong regarding Antimicrobial Peptides

- A) work by making pores in the cells B) Anionic peptides
- C) Defincin is an example of antimicrobial peptides D) part of innate immunity

#### 29) Wrong about GVHD

A) common after kidney transplant B) Doesn't occur in identical twins

C) Female Donor to male increases the risk because MHC1 are on Y chromosome

D) CD4 and CD8 of the recipient initiate the disease

#### 30) neonate immunity is mainly by

A) IgM	<mark>B)</mark> IgA

- C) IgG D) IgE
- E) IgD

31) which of the following cells is not from a myeloid origin					
A) Macrophage	<mark>B)</mark> Neutrophil				
C) Natural killer	D) Mast cell				
32) Histamine releasing cell and contributes in hypersensitivity					
A) Neutrophil	B) CD8 lymphocyte				
C) Mast cell	D) Dendritic cell				
33)Which of the following doesn'	't Express MHC II				

A) Neutrophil	<b>B)</b> Endothelial stimulated cell
C) Macrophage	D) B cell

E) Dendritic cell

34) How many binding sites there are between Complementarity Determining Regions (CDR) and an antigen on one Fab

- A) 0 B) 2
- C) 3 D) 6

#### 35) Which of the following isn't true about Allograft rejection

A) Lymphocytes of the recipient recognize DAMPs of the allograft as non self

**B)** Activate T cells of the recipient by donor non self antigens

**C)** Activate T cells of the recipient by donor's self antigens presented of recipient APC

# 36) Which of the following has hyper gene recombination for its receptors during maturation

- A) Alpha-beta T lymphocytes
- **B)** Gamma-delta T lymphocytes

C) Macrophages

D) Mast cells

#### 37) Which of the following best describes complementary system

A) A group of carbohydrates and lipids that circulate in the blood and a part of immune system

- **B)** A group of proteins for opsonization and inflammatory response
- C) Always activated proteins circulate in blood

#### 38) Wrong about MHC molecules

- A) Variable between population
- **B)** Variability causes different susceptibility to diseases between population
- C) cross presentation presents antigen on MHC II

#### 39) Wrong about Macrophages

- A) Phagocytosis of opsonized and non-opsonized Antigens
- B) They can activate Naïve T cells
- **C)** Could be found as resident cells in different tissues

1 Missed question 😕

ANSWERS: -





27	28	29	30	31	32	33	34	35	36	37	38	<b>39</b>
D	В	С	С	С	С	Α	D	Α	Α	В	С	В

GOOOOOOOOD LUCK