

MIDTERM COLLECTED QUESTIONS OF IMMUNOLOGY & MICROBIOLOGY 018

1- responsible of **antiviral state** -> IFN- γ

2- the main component of the **capsule** -> water

3- the most accurate conclusion when we find viral antigen using ELISA -> **the presence of viral particles**

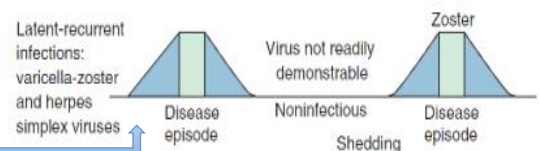
4- causes hearing loss -> **CMV**

5- correct about endotoxins -> **heat stable**

6- false about biofilm -> **essential for bacterial survival**

7- false about pathogenicity islands -> **encode endotoxins**

8- HSV2 -> **Pattern B**



9- Which patient had more viral content -> **A**

10- forms spores -> **clostridium**

11- low affinity adhesion molecules on leukocytes -> **sialyl lewis X**

12- clean endoscope using -> **ethylene oxide**

13- False about autoclave -> **use it for 20-30 hours to sterile objects**

14- AAV -> **class II**

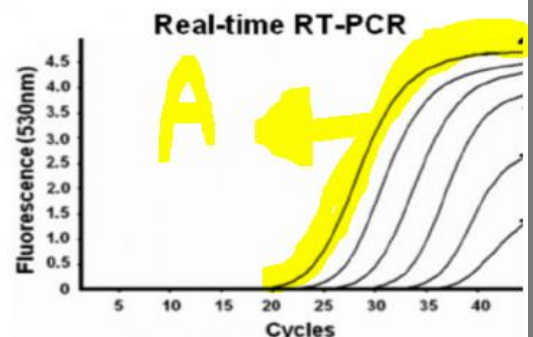
15- early infection control -> **john snow** (this question was deleted because another choice was Ignas Semelweis)

16- lowered during infection -> **transferrin**

17- general transduction -> **lytic cycle**

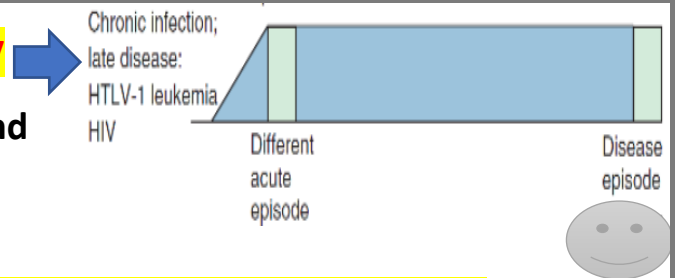
18- forces bacteria to take up DNA -> **transfection** (this question was deleted because it isn't mentioned in the slides)

19 - breast milk -> **IgA** (this question was deleted because the percentage of students who chose the right answer was low)



- 20- Wrong about antibodies -> **The Fc is made of both heavy and light chains**
- 21- amphitrichous -> **on both sides**
- 22- wrong about normal flora -> **can be cleared from all over the body using simple methods**
- 23- Bacteria in dark and takes carbon from organic molecules -> **chemoheterotrophs**
- 24- not accessory -> **cell envelope**
- 25- to inhibit adhesion -> **use inhibitors for fimbriae**
- 26- wrong about spores -> **it is a reproductive method**
- 27- wrong about bacterial growth -> **the size increases during the lag phase**
- 28- thymine dimer mutation is -> **none of the above**
- 29- the best way to study microbiome -> **16 rRNA**
- 30- true about microbiota -> **difference due to life styles and diet**
- 31- wrong about transmission -> **high inoculum size means stronger pathogen**
- 32- if TDI50 was 10^{-6} . when the number of viruses decreases by using antivirals then TDI50 becomes -> **10^{-2}**
- 33- isn't expected to decrease after the inhibition of C3 convertase -> **Binding of C1q**
- 34- involved in LPS signalling -> **CD14**
- 35- has coagulase enzyme -> **S. Aureus**
- 36- true about quorum sensing -> **communication between bacteria according to their densities**
- 37- Wrong about neutrophils -> **they remain mainly in tissues.**
- 38- doesn't inhibit phagocytosis -> **the presence of peptidoglycans**
- 39- Wrong about innate immunity -> **complex only found in jawed vertebrate**
- 40- true -> **affinity interaction is reflected in strong antibody antigen binding**
- 41- true about skin microbiota -> **changes according to its location**
- 42- Wrong -> **CD4+ cells can bind soluble antigens**

43- true about the graph -> **D represents HIV**



44- what is used to determine the species and genus of virome -> **DNA sequencing**

45- wrong about allograft rejection ->

lymphocytes of the recipient recognize DAMPs of the allograft as non-self

46- wrong about MHC -> **found in innate immunity**

47- Which cell has a receptor for one specific antigen -> **alpha beta t cell**

48- more suitable cell for growing viruses -> **Hela**

49- CD8+ after activation in secondary lymphoid organs called -> **activated mature cytotoxic**

50- The mice that is injected with the antigen for the first time -> **innate immunity if it is recognized by PRR**

51- proinflammatory -> **activation of M1 pathway**

52- defensins are -> **anti-microbial peptides**

53- soluble PRR -> **pentraxin 3**

54- CDR -> **variable regions**

55- not found on cellular or endosomal membranes -> **RIG-like receptors**

56- PFU -> **12×10^{-6}** (this question was deleted because there was two identical choices)

57- When we add bile acids to MacConkey agar-> **selective media**

58- soluble regulator -> **factor H**

59- wrong about macrophages -> **tissue resident macrophages such as osteoclasts and Kupffer cells are mainly derived from bone marrow**

60- wrong about kidney transplant -> **APCs of the donor play a role in it**

61- doesn't represent MHC 2 molecules -> **FDC**