

# **FINAL COLLECTED QUESTIONS OF MICROBIOLOGY & IMMUNOLOGY 018**

**1. A female present with urethral infection with discharge. Under the microscope, gram-negative diplococci can be seen. What are these bacteria?**

Answer: *Neisseria gonorrhoeae*

**2. Which of the following is the most common cause of wound infections?**

Answer: *Pseudomonas aeruginosa*

**3. Which of the following does not have an Enterobacteriaceae antigen?**

Answer: *Lactobacilli*

**4. We cultured the blood of a person with bloody diarrhea and bacteria grew at 42° C and at 5% oxygen. What are these species?**

Answer: *Campylobacter jejuni*

**5. The urea breath test is done for the presence of which bacteria?**

Answer: *H. pylori*

**6. Which of the following is a main cause of orchitis in males?**

Answer: Mumps

**7. Cataract, deafness, and heart problems are symptoms of:**

Answer: Congenital rubella syndrome

**8. The most common cause of viral pharyngitis is:**

Answer: Rhinovirus

**9. Rhinovirus is:**

Answer: +ssRNA virus with non-segmented genome

**10. How many D genes are found in the  $\alpha$  chain of T cell receptor?**

Answer: 0

**11. Which of the following proteins is responsible for adding nucleotides in the hypervariable regions?**

Answer: TdT

**12. A new immunotherapy was discussed in 2016 where immune cells are taken from the host and get activated in vitro. This therapy is considered as:**

Answer: adoptive cell therapy

**13. 'Talimogene laherparepvec' is a new therapy based on injecting viruses that target tumor cells to treat melanoma. This new therapy is considered as:**

Answer: Vaccine

**14. Which of the following genes is associated with an increased risk of ankylosing spondylitis?**

Answer: HLA-B27

**15. The most common cause of post-infection pneumonia after influenza is:**

Answer: *S.aureus*

**16. Which of the following is an intracellular helminth that resides in muscle cells?**

Answer: *Trichinella spiralis*

**17. Which of the following statements is false?**

Answer: CD8 t cells recognize antigens presented on MHC II

**18. Which of the following is true regarding lyme disease?**

Answer: Symptoms are fever and rashes

**19. Aflatoxin is mainly produced by:**

Answer: *Aspergillus spp.*

**20. Which of the following diseases is not related to B19?**

Answer: B cell lymphoblastic leukemia.

**21. What does polyoma JC virus cause?**

Answer: PML

**22.Which of the following is associated with flask-shaped ulcer in the intestines?**

Answer: *Entamoeba histolytica*

**23. After a colon endoscopic surgery, a patient is present with endocarditis. A penicillin resistant bacterium was extracted in two different occasions. What is this bacterium?**

Answer: *E.faecalis*

**24. Which of the following is an inactivated vaccine?**

Answer: Hepatitis A vaccine

**25. What does attract partially-activated B cells to get back to follicles?**

Answer: FDC

**26. Regulatory T-cells are kept alive and function thanks to:**

Answer: IL-2

**27. What is the main cytokine involved in fighting dormant TB residing in macrophages?**

Answer: IFN gamma

**28. Which of the following can be used to culture Mycobacterium species?**

Answer: Middlebrook Agar

**29. Which of the following is true regarding candida**

Answer: They are found as yeast in mucus membranes and pseudo hyphae when they invade tissues

**30. Which of the following is not part of the normal flora?**

Answer: Cryptococcus neoformans

**31. Gram-positive bacteria that appear as hyphae under the microscope:**

Answer: Actinomyces

**32. The most common cause of lower respiratory infections in infants is:**

Answer: respiratory syncytial virus

**33. Which of the following viruses has a diploid genome?**

Answer: HIV

**34. When is someone infected with HIV considered as an AIDS patient?**

Answer: when CD4 blood count less than 200cells/ $\mu$ L

**35. A patient is present with a watery diarrhea after two hours of eating a meal. Which of the following statements is wrong?**

Answer: Symptoms will last for a week

**36. Which of the following statements is wrong?**

Answer: MRSA is responsible for 50% of all community and hospital acquired infections.

**37. Which of the following is false about memory B cells?**

Answer: They stay in the lymph nodes/spleen and don't circulate

**38. The source of antibodies present in circulation after years of infection is:**

Answer: long lived plasma cells in the bone marrow

**39. Which of the following genes is related to increased risk of APS1?**

Answer: AIRE

**40. A patient is present with erythematous rashes all over her body. It is found that this disease results from attacks on nuclear components. What is this disease?**

Answer: SLE

**41. A good marker of autoimmune diseases is:**

Answer: ANA

**42. Herd immunity is not a result of:**

Answer: Toxoid vaccines

**43. The best way to prevent H1N1 influenza infection is:**

Answer: Hand washing and vaccination.

**44. The main receptor involved in activation of B cells is:**

Answer: BCR

**45. What do mature B cells have on their surface?**

Answer : IgM,IgD

**46. The vector of sleeping sickness disease is:**

Answer: Tse Tse fly

**47. Which of the following is false about autoimmune diseases?**

Answer: They are self-limited

**48. A mutation in filaggrin gene can lead to:**

Answer: Atopic dermatitis

**49. A person was diagnosed as having pharyngitis caused by**

**group A streptococcus. After two weeks, he is present with endocarditis. by what mechanism this has happened?**

Answer: molecular mimicry

**50. A person with S. pyogenes pharyngitis did not take therapy and the illness has gone by its own. After a while he suffers from chest pain. Which of the following is true?**

Answer: Could be prevented if it was treated initially with antimicrobials.

**51. Which of the following is a rapidly growing mycobacterium?**

Answer: Mycobacterium abscessus

**52. The least developed progenitors in the thymus are called:**

Answer: Pro T-cells

**53. The most common cause of aseptic meningitis is:**

Answer: Picornaviridae

**54. What is the mode of multiplication in Giardia Lamblia?**

Answer: Binary fission

**55. Which of the following species can cause flaccid paralysis?**

Answer: clostridium botulinum

**56. Cyclosporine side effect include:**

Answer: nephrotoxicity, neurotoxicity and hirsutism.

**57. Which of the following drugs may exacerbate seizures?**

Answer: Tacrolimus.

**58. Which of the following is a calcineurin inhibitor?**

Answer: Tacrolimus

**59. Not a cause for monitoring cyclosporine level:**

Answer: Its high cost

**60. Which of the following is false about trichomonas vaginalis?**

Answer: It is sexually transmitted in the cyst phase

**61. Which of the following is false regarding chlamydia trachomatis?**

Answer: It can't be transmitted by inanimate objects

**62. Mismatch:**

Answer: Hepatitis E --- transmitted through blood transfusion

**63. A newborn is heterozygous for the BCR gene. He's got type M1 from his father and type M2 from his mother. What types of BCR proteins would be expressed in this infant?**

Answer: Only one of them

**64. A patient who suffers from recurrent encapsulated bacteria infections most likely has:**

Answer: B-cell deficiency

**65. Which of the following is wrong regarding T cells?**

Answer: They recognize conformational determinants

**66. Which of the following viruses replicate in the cytoplasm?**



Answer: Variola virus

**67. Axial filaments between inner and outer membranes are found in:**

Answer: Treponema pallidum

**68. The definitive host of Echinococcus granulosus is:**

Answer: Dogs

**69. The phase that follows sporozoites in plasmodium life cycle is:**

Answer: Schizont

**70. Which of the following can be diagnosed using slit lamp?**

Answer: HSV keratitis

**71. Which of the following statements is false?**

Answer: When B7 does not bind to CD28, IL-4 is not transcribed (anergy)

**72. Symbiosis is:**

Answer: All of the above (parasitism+mutualism+commensalism)

**73. The most common helminthic infection among children is:**

Answer: Enterobius vermicularis

**74. A drug which inhibits neuraminidase action and is used to treat Influenza A and B:**

Answer: Oseltamivir

**75. Mupirocin and chlorhexidine are used as a combination in:**

Answer: Nose antiseptic against MRSA

**76. Which of the following infections is zoonotic**

Answer: Bartonella

**77. A trematode which is pathogenic through eggs:**

Answer: Schistosoma mansoni

**78. The best way to manage allergy is:**

Answer: Determining the culprit allergen and avoiding it

**79. Which of the following is true regarding sporotrichosis?**

Answer: The causative agent is commonly introduced into wounds while gardening

**80. Which of the following is not expected to decrease the immune response against helminths?**

Answer: Inhibition of neutrophil phagocytic ability

**81. All of the following helped in eradication of smallpox except:**

Answer: The antigenic instability of the virus.

**82. Which of the following is a DNA virus?**

Answer: Hepatitis B virus

**SAMIA SIMRIN** 🌟

**AMEEN ALSARAS** 🙏

لا يظمأ قلبٌ كان الدعاء له سقياً ، إن الله معك حاشاه أن ينسأك أو يقطعك. ✨