

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Question Bank (w.e.f. June 2021)

Class and sem no.: BSc III Sem VI

Subject: Microbiology

Title of paper: Clinical microbiology

2 marks Questions

1. Write about Morphology of Clostridium perfringens
2. What are Treatment and preventive measures of cholera?
3. Write about antibiotic resistance by Pseudomonas Aeruginosa
4. What are signs and symptoms of rabies?
5. How does Transmission of HIV virus occurs?
6. Enlist various Bacteria with the potential to be used as bioweapons.
7. Enlist various viruses that can be used as bioweapons.
8. What is the treatment of Malaria
9. How can we dispose sharp devices and culture media used in microbiology laboratory?
10. How can we dispose smeared slides in microbiology laboratory?
11. How used or unused clinical sample can be disposed?
12. What are the precautions to be taken while handling clinical sample?
13. Mention the factors of Pathogenicity of viral infections
14. Mention the factors of pathogenicity fungal infections
15. What is Morphology of Ebola virus
16. What is Morphology of H1N1
17. What is Morphology of HIV virus
18. Give examples of antifungal antibiotics
19. Give examples of antiviral drugs
20. What is the concept of selective toxicity
21. What is difference between bacteriostatic and bactericidal drugs?
22. Give examples of broad spectrum antibiotics
23. Give examples of antibiotics acting on cell wall
24. Give examples of antibiotics acting on protein synthesis
25. What is the concept of pathogenicity

26. Define lepromatous leprosy.
27. Write short note on prevention of Ebola infection.
28. Explain in short mode of action of amphoterecin B.
29. Enlist the various symptoms of rabies.
30. What is inactivation and modification of drug?
31. Define oral thrush
32. Enlist ideal characteristics of antibiotics
33. Define antimicrobial drug
34. Define nosocomial infection
35. What is duodenal ulcers
36. Write in short about negri bodies
37. What is genital herpes
38. Enlist ideal characteristics of biological weapons
39. Explain in short about Lepromin test
40. Write in short mode of action of AZT
41. What is significance of Germ tube test
42. Enlist the nucleic acid inhibitor antibiotic.
43. Enlist various factors contributing hospital infection
44. Write in short about Morphological characters of *clostridium perfringens*
45. Draw neat and labeled Structure of HIV virus
46. Define biological warfare
47. Enlist the antibiotics acting on cell wall
48. Define - Drug resistance.

49. Give two examples of antimicrobial drugs acting on protein synthesis.

50. What is Chemotherapy?

51. Gas gangrene is caused by which bacterial pathogen?

52. Plasmodium vivax is causative agent of which disease?

53. What is the Causative agent of AIDS ?

54. Causative agent of Rabies belongs to which virus family?

55. Give any two advantages of bioweapons.

56. Which are the types of traditional vaccines?

- 57..Define bioweapons.
58. Define opportunistic pathogens.
59. Give two examples of killed vaccines.
- 60.Give two examples of live attenuated vaccines.
- 61.Define pathogenicity and virulence.
- 62.What is endotoxin?
63. Rabies and Influenza vaccines are type of which kind of vaccines.
64. What is microbial adhesion?
65. What is Mode of action of penicillin.
66. Which two hosts are involved in plasmodium infection?
67. What are benefits of vaccines?
68. Give two disadvantages of bioweapons.

Questions for 4 Marks

1. Discuss Epidemiology of cholera
2. How Prevention of Rabies is carried out?
3. Which are the Preventive measures HIV infection
4. Write about Lab diagnosis of Malaria
5. Write a note on Morphological stages of Malarial parasite
6. Write note on Bacterial toxins
7. Write note on Pathogenesis of Gas gangrene
8. What are complications of HIV infection?
9. What are common illnesses associated with AIDS related complexes?
10. Enlist Various types and sites of Tinea infection
11. What are Symptoms ofGiardiasis
12. Describe Morphology Giardia lamblia
13. Discuss Life cycle of Giardia lamblia
14. Describe Mode of action of Streptomycin

15. Describe Mode of action of penicillin
16. Describe Resistance to penicillin
17. Discuss the impact of vaccination with examples
18. Describe Lab diagnosis of Cholera
19. Describe Lab diagnosis of Leprosy
21. Give a detailed account on mode of action of streptomycin
22. What is beta lactum antibiotics and give a detailed account on mode of action of penicillin
23. Give a detailed account of antibiotic sensitivity test.
24. Describe in short about pathogenesis of bacterial infection
25. Describe in detail about principle, procedure and applications of disc diffusion method of antibiotic sensitivity
26. Explain in short about spread, prevention and control of malaria infection.
27. Explain in short about Dermatophycoses.

QUESTIONS TO BE ASKED FOR 5 MARKS

1. Discuss Lab diagnosis of cholera
2. What are the characteristics of ideal bioweapon?
3. What are the characteristic if an ideal drug?
4. What are the symptoms of Malaria?
5. Discuss Principles of Bacterial adhesion
6. Discuss Principles of bacterial invasion
7. Write an essay on new generation vaccines
8. Discuss Synergistic effect of sulphonamides and trimethoprim
9. Write a note on Minimum inhibitory concentration
10. What are advantages and disadvantages of bioweapons
11. Describe in brief virulence factor that promote protozoan colonization
12. Discuss in detail mode of transmission and symptoms of cholera
13. Describe in detail epidemiology and pathogenesis of herpes virus
14. Describe in brief virulence factors that promote fungal colonization
15. Describe in detail epidemiology and pathogenesis of hepatitis B

16. Discuss in detail mode of transmission and symptoms of cholera
17. Discuss in detail mode of transmission and symptoms of *Clostridium perfringens*
18. Discuss in detail mode of transmission and symptoms of *Pseudomonas aeruginosa*
19. Define vaccine and explain in short about different types of vaccine.
20. Explain in short about Types of bacterial toxins and its mechanism of action.
- 21.. Describe Mechanism of action of Trimethoprim.
22. How live attenuated vaccines are prepared? Explain with example.
23. Describe Prophylaxis for Ebola infection.
24. Describe Prophylaxis for Giardiasis infection.
- 25 Describe. Mechanism of bacterial invasion.
26. Describe Bacterial endotoxin types and mechanism of action.
27. Describe. Bacterial exotoxin types and mechanism of action.
28. Explain basic mechanism of pathogenicity by bacteria.
29. Give advantages and disadvantages of bioweapons.
30. What are diffusion and broth dilution methods in chemotherapy?
- 31.. Describe Mechanism of action of antiprotozoal drugs during chemotherapy.
32. Describe Mechanism of pathogenicity of viral infection.
- 33 Describe. Mechanism of pathogenicity of fungal infection.

QUESTIONS TO BE ASKED FOR 8 MARKS

1. Write an essay on Leprosy
2. Describe stages of HIV infection
3. Write an essay on Lab diagnosis of HIV infection
4. Write an essay on Life Cycle of *Plasmodium vivax*
5. Write an essay on Strategies to develop vaccine against pathogen
6. Write an essay on Mechanism of Antibiotic resistance
7. Differentiate between lepromatous and tuberculoid leprosy
8. Write a detailed note on swine flu
9. Differentiate between live and killed vaccines
10. Discuss Mechanism of pathogenicity of bacterial infections

11. Discuss in detail modes of transmission pathogenesis symptoms and treatment of hepatitis B virus

12. Discuss in detail mechanism of drug acting on cell wall of bacteria
13. Discuss in detail modes of transmission pathogenesis symptoms and treatment of AIDS
14. Describe in detail life cycle of malarial parasite and enlist various preventive measures for malaria infection
15. Describe in detail life cycle of *Plasmodium vivax*
16. Discuss in detail mechanism of drug resistance and problems encountered due to drug resistance.
17. Discuss in detail modes of transmission pathogenesis symptoms and treatment of cholera
18. Discuss in detail pathogenesis, symptoms and prevention of disease caused by *Clostridium perfringens*
19. Describe in detail account on the swine flu virus
20. Discuss in detail pathogenesis, symptoms and prevention of disease caused by Rabies virus
21. Give a detailed account of biological warfare.
22. Explain in detail about principle of bacterial adhesion.

23. Describe in detail about the laboratory methods used for disposal of cultures, culture media and clinical samples
24. Describe disease caused by *Mycobacterium leprae*.

25. Write in brief about bacterial toxins.

26. Describe in detail traditional vaccine.

27. Give mechanism of action of antibiotics acting on protein synthesis