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Question Bank

Paper XVI: Medical Microbiology

Q. Choose correct answer and rewrite the sentence (MCQ)

Q.1 .---- is an infective form of Plasmodium species.

- A) Hypnozoite
- B) Sporozoites
- C) Merozoites
- D) Schizonts

Q.2. --- test used for diagnosis of Syphilis.

- A) VDRL
- B) CFT
- C) RIA
- D) ELISA

Q.3. Inba and Ogwa serotypes are associated with-----

- A) Mycobacterium tuberculosis
- B) Vibrio cholerae
- C) Pseudomonas aeruginosa
- D) Hepatitis-B

Q.4. Coagulase enzyme produced by---organism.

- A) Klebsiella pneumoniae
- B) Salmonella typhi
- C) Clostridium prefringens
- D) Staphylococcus aureus

Q.5. Quinolones blocks -----synthesis.

- A) Cell wall

B) Cell membrane

C) Protein

D) Nucleic acid

Q.6. Trimethoprim blocks -----synthesis.

A) Cell wall

B) Folic acid

C) Cell membrane

D) Protein

Q.7. Transpeptidation reaction of peptidoglycan is blocked by----antibiotic.

A) Penicillin

B) Polymyxin

C) Streptomycin

D) Tetracycline

Q.8. In the production of recombinant vaccine----is used as vector.

A) Vaccinia virus

B) Vibrio spp

C) Salmonella spp

D) Shigella spp

Q.9. -----occurs in hepatic cell infected with malarial parasite.

A) Hypnozoite

B) Sporozoites

C) Merozoites

D) Schizonts

Q.10. Painless chancres are formed in---disease.

A) Tuberculosis

B) Leptospirosis

C) Malaria

D) Syphilis

Q.11.---- is also called as Friedlanders bacillus

A) Streptococcus pneumoniae

- B) *Klebsiella pneumoniae*
- C) *Pseudomonas aeruginosa*
- D) *Candida albicans*

Q.12. *Staphylococcus aureus* causes-----infection.

- A) Wound
- B) Ear
- C) Eye
- D) Lung

Q.13. ---- antibiotic binds to 30S ribosomal subunit there by blocking the binding of aminoacyl-tRNA to the acceptor site.

- A) Penicillin
- B) Polymyxin
- C) Streptomycin
- D) Tetracycline

Q.14. Quinolones inhibits the action of DNA-----enzyme.

- A) Helicase
- B) Gyrase
- C) Ribonuclease
- D) Polymerase

Q.15. ----- drug inhibits the action of dihydropteroate synthase there by blocking conversion of PABA to dihydropterate.

- A) Sulphonamides
- B) Imidazoles
- C) Zydovudine
- D) Acyclovir

Q.16. Hyper immunoglobulins from Animal origin are used for-----immunization

- A) Artificial Active
- B) Natural Active
- C) Natural Passive
- D) Artificial Passive

Q.17. ----- from erythrocytes enter in mosquito while feeding on blood of infected person.

- A) Gametocytes
- B) Sporozoites
- C) Merozoites
- D) Ookinete

Q.18. Reiter and Nichols strain are used in diagnosis of ---- disease by Wasserman's test.

- A) Leptospirosis
- B) Pneumonia
- C) Tuberculosis
- D) Syphilis

Q.19. ----- is a tissue degrading enzyme produced by Pseudomonas pathogen.

- A) Staphylokinase
- B) Coagulase
- C) Kinase
- D) Collagenase

Q.20. Cholera toxin produced by Vibrio cholera converts ATP to -----

- A) cAMP
- B) cADP
- C) cATP
- D) cGMP

Q.21. ---- antibiotic blocks DNA replication process

- A) Penicillin
- B) Quinolones
- C) Bacitracin
- D) Piperacillin

Q.22. Ketoconazole blocks synthesis of ----- in cell membrane.

- A) Squaline
- B) Acetyl Co-A
- C) Lanosterol
- D) Ergosterol

Q.23. Streptomycin binds to ---- protein of 30S subunit of ribosome.

A) P10

B) Q10

C) R10

D) T10

Q.24. ----- is a antiprotozoal drug

A) Metronidazole

B) Nystatin

C) Griseofulvin

D) Cycloserine

Q.25. In-----disease haemoglobin is converted to hemozoin.

A) Leishmaniasis

B) Gonorrhoea

C) Typhus

D) Malaria

Q.26. -----disease transmitted congenitally.

A) Hepatitis-A

B) Syphilis

C) Tuberculosis

D) Cholera

Q.27. -----enzyme produced by Staphylococcus that converts fibrinogen in to fibrin.

A) Coagulase

B) Collagenase

C) Kinase

D) Lecithinase

Q.28. Vibrio cholerae -----strain produces powerful enterotoxin.

A) O1 & O139

B) O2 & O140

C) O3 & O141

D) O4 & O142

Q.29. AZT act as analog of----

- A) Adenine
- B) Guanine
- C) Thymidine
- D) Cytocine

Q.30. ---act as precursor for folic acid synthesis.

- A) ABAP
- B) PABA
- C) Lanosterol
- D) Ergosterol

Q.31. ----is an example of recombinant vaccine.

- A) Diphtheria
- B) Salks
- C) Sabins
- D) Hepatitis-B

Q.32. Nystatin is used in treatment of-----infection.

- A) Bacterial
- B) Viral
- C) Fungal
- D) Parasitic

Q.33. Severe anaemia develops in Plasmodium-----disease.

- A) Vivax
- B) Malariae
- C) Falciparum
- D) Ovale

Q.34 -----Pathogen develops latent infection.

- A) Hepatitis-A
- B) Treponema pallidum
- C) Hepatitis-B
- D) Vibrio cholerae

Q.35. ---- is an enzyme produced by Staphylococcus that degrades red blood cells.

- A) Leukocidins
- B) Coagulase
- C) Neuraminidase
- D) Hemolysins

Q.36. *Pseudomonas aeruginosa* produces ----pigment.

- A) Rhodospirillum
- B) Pyocyanin
- C) Rubin
- D) Rhodorubin

Q.37. Griseofulvin, Ketoconazole, are the drugs used in treatment of----infection.

- A) Fungal
- B) Mycoplasma
- C) Rickettsia
- D) Chlamydia

Q.38. ----- drug inhibits the action of dihydropteroate synthase there by blocking conversion of PABA to

dihydropterate.

- A) Sulphonamides
- B) Imidazoles
- C) AZT
- D) Ketoconazole.

Q.39. ----is a narrow spectrum antibiotic.

- A) Penicillin
- B) Ciprofloxacin
- C) Streptomycin
- D) Tetracycline

Q.40. ----belongs to aminoglycoside group of antibiotics.

- A) Penicillin
- B) Polymyxin
- C) Streptomycin
- D) Nalidixic acid

Q.2. Answer the following (Long answers)

1. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by *Leptospira interrogans*.

2. Explain mode of action of Streptomycin, Penicillin and Tetracycline

3. Discuss in brief live attenuated, inactive, subunit vaccines.

4. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by *Vibrio cholerae*

5. Define chemotherapy, Discuss in brief mode of action of Trimethoprim, Sulphonamides and Quinolones

6. What is drug resistance? Discuss in brief any three mechanism of drug resistance

7. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by *Mycobacterium tuberculosis*.

8. What is chemotherapy? Discuss in brief mode of action of Ketoconazole and Quinolones and AZT

9. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by *Treponema pallidum*

9. Define chemotherapy, Discuss in brief mode of action of Trimethoprim, Sulphonamides and Nystatin.

10. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by *Plasmodium falciparum*

11. Define vaccine, Discuss in brief -live attenuated, inactive, subunit vaccine with one example each.

12. Define chemotherapy, Discuss in brief mode of action of Mepacrine, AZT and Quinolones

13. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by *Clostridium perfringens*

14. Define immunoprophylaxis, Discuss in brief attenuated vaccines and Immune Sera with examples and

applications

15. Describe in brief Causative agent, Mode of transmission, Pathogenesis, Prevention and control of disease

caused by Rabies virus

Q.3. Short notes

1. Prevention and treatment of Candidiasis
2. Diagnosis and prevention control of Leptospirosis
3. Diagnosis of Syphilis
4. Mechanism of drug resistance
5. DNA vaccines
6. Immune sera any two examples with their application
7. Erythrocytic cycle of Plasmodium falciparum.
8. Mantoux test
9. Microscopic examination of Tuberculosis
10. Cultivation of Mycobacterium tuberculosis
11. Mode of action of Piperacillin
12. Mode of action of Cycloserine
13. Toxins produced by Clostridium perfringens
14. Prophylaxis of Rabies
14. Mode of action of Nystatin
15. Mode of action of Griseofulvin
16. Diagnosis of Clostridium perfringens
17. Mode of action of Mepacrine
18. Mode of action of Penicillin
19. Mode of action of Metronidazole
20. Bufficoat test
21. Naglers reaction
22. Conjugate vaccines
23. Toxins produced by Staphylococcus aureus
24. Mode of action of AZT and Piperacillin
25. Chemoprophylaxis with any two examples
26. Define Immunoprophylaxis with any two examples

27. Immune sera
28. Chemotherapeutic index
29. Characteristics of ideal vaccine
30. Characteristics of ideal chemotherapeutic agent