

1. According to Spaulding classification, Laparoscopic and arthroscopic instruments are under:

- a) Critical item
- b) Semi critical item
- c) Noncritical item
- d) None of the above

a

2. Sputum can be disinfected by all except:

- a) Autoclaving
- b) Boiling
- c) Cresol
- d) Chlorhexidine

d

3. Recommended transport medium for stool specimen suspected to contain enteric pathogens is:

- a) Amie's medium
- b) Buffered glycerol saline medium
- c) MacConkey medium
- d) Blood agar

b

4. All of the following are required in PCR except:

- a) Deoxyribonucleotides
- b) Thermostable enzyme/ DNA polymerase
- c) Dideoxyribonucleotides
- d) Magnesium/ ssDNA/ Template DNA

c

5. Drug against ESBL producing Pseudomonas:

- a) Ceftriaxone + Piperacillin
- b) Ceftriaxone + Tazobactam
- c) Piperacillin + Tazobactam
- d) Ceftriaxone + Piperacillin + Tazobactam

c

6. For antibiotic sensitivity test, the organism broth prepared should match with:

- a) McFarland standard 0.5
- b) McFarland standard 1
- c) McFarland standard 2
- d) McFarland standard 3

a

7. All of the following are a part of the innate immunity except:

- a) Complement
- b) NK cells
- c) Macrophages
- d) T cells

d

8. Span of C reactive protein half-life:

- a) 18 hrs
- b) 2 hrs
- c) 12 hrs
- d) 15 hrs

a

9. All of the following statements about hybridoma technology are true except:

- a) Specific antibody producing cells are integrated with myeloma cells
- b) Myeloma cells in salvage pathway grows well in HAT medium
- c) Aminopterin, a folate antagonist, inhibits denovo pathway
- d) HGPRT ase and thymidylate synthetase are required for salvage pathways.

b

10. A 20-year old with a history of fever and enlarged lymph nodes and sore throat was suspected to have infectious mono-nucleosis and was ordered a Paul Bunnell test. Which of the following is the principle of the test?

- a) Heterophile agglutination test
- b) Neutralization test
- c) Compliment mediated cell damage
- d) Agglutination reaction

a

11. A new agent was developed to increase the recognition of foreign antigens by Antigen presenting cells. True regarding the physiological aspects of APCs.

- a) Antigen is presented via MHC-I complexes
- b) APCs are required before a response to viruses are generated
- c) Direct antibody stimulation still requires APCs
- d) Antigen processed by APC are recognized by CD4+ T Cells

d

12. The role played by MHC 1 and 2 is to:

- a) Stimulate interleukin production
- b) Immunoglobulin class switch over
- c) Transduce the signal to T- Cells following antigen binding
- d) Presenting the antigen for recognition by T-cell antigen binding receptors

d

13. Two days after penicillin administration, antibodies developed that resulted in hemolysis. Which type of hypersensitivity reaction is this?

- a) Type-I
- b) Type-II
- c) Type-III
- d) Type-IV

b

14. Which of the following is type IV hypersensitivity reaction?

- a) Arthus reaction
- b) Serum sickness
- c) Schwartzman reaction
- d) Granulomatous disease

d

15. According to national immunization schedule, which of the following is recommended for a child of 5-year of age?

- a) Pentavalent vaccine and vitamin A
- b) DT booster
- c) DT, OPV and Vitamin A
- d) DPT booster and Vitamin A

d

16. In a 5-year-old boy who has history of pyogenic infections by bacteria with polysaccharide-rich capsules, which of the following investigations should be done?

- a) IgA deficiency
- b) IgG1 deficiency
- c) IgG2 deficiency
- d) IgA and IgG2 deficiency

c

17. Cephalosporin with anti-MRSA activity:

- a) Ceftiaxone
- b) Aztreonam
- c) Cefazolin
- d) Ceftobiprole

d

18. MC phage type of Staphylococcus aureus is:

- a) 70/80
- b) 3A/3B
- c) 80/81

c

19. Coral cuts are associated with:

- a) Vibrio vulnificus
- b) Pseudomonas aeruginosa
- c) Staphylococcus aureus
- d) Streptococcus Species

d

20. A 65-years old patient presented to the emergency with high grade fever, chest pain, increased respiratory rate and cough with expectoration. His sputum was sent to the laboratory for gram staining which showed the presence of pus cells and gram positive cocci in pair. Which of the following will help in confirming the diagnosis?

- a) Bacitracin sensitivity
- b) Catalase test
- c) Bile solubility
- d) Coagulase test

c

21. Conjugate vaccines are available for the prevention of invasive disease caused by all of the following except

- a) H influenzae
- b) Strep pneumonia
- c) N. meningitidis (group C)
- d) N. meningitidis (group D)

d

22. A patient has a history of sexual intercourse with a commercial sex worker 3 days back, has developed genital discharge resembling 'flow of seed'. What medium should be used for culture of the discharge material?

- a) Mannitol salt agar
- b) Thayer-Martin media
- c) Potassium tellurite agar
- d) TCBS

b

23. True about *Corynebacterium diphtheria*:

- a) All types produce toxin
- b) Toxin production is dependent upon critical concentration of iron
- c) Coded by plasmid
- d) Inhibit cAMP

b

24. Medusa head colony is seen in:

- a) *Bordetella pertussis*
- b) *Bacillus anthracis*
- c) *Bartonella henselae*
- d) *Bacteroides* species

b

25. Botulism is most commonly due to:

- a) Egg
- b) Milk
- c) Meat
- d) Canned vegetables

d

26. With reference to *Bacteroides fragilis* the following statements are true, except:

- a) *B. fragilis* is the most frequent anaerobe isolated from clinical samples.
- b) *B. fragilis* is not uniformly sensitive to metronidazole
- c) The lipopolysaccharide formed by *B. fragilis* is structurally and functionally different from the conventional endotoxins
- d) Shock and disseminated intravascular coagulation are common in *Bacteroides* bacteremia

d

27. Agent used in interferon gamma release assay for diagnosis latent tuberculosis is:

- a) MPT 64
- b) Mycolic acid
- c) Lipoarabinomannan
- d) ESAT-6

d

28. False about lepromin test

- a) Negative in children < 6 months age
- b) It is a diagnostic test
- c) Used to classify leprosy
- d) BCG vaccine may convert a negative lepromin test to positive.

b

29. A 2-year old man presented with hemorrhagic colitis. The stool sample grew *Escherichia coli* in pure culture. The following serotype of *E. coli* is likely to be causative agent:

- a) O157:H7
- b) O159:H9
- c) O107:H7
- d) O55:H7

a

30. Farmer presents with the features of high fever, painful inguinal lymphadenopathy, vomiting and diarrhea and hypotension. Which stain will help in the diagnosis?

- a) Neisser stain
- b) Wayson's stain
- c) Albert's stain
- d) McFadyean's stain

b

31. Cholera patient having stool output 1000-1500 ml/day is known as:

- a) Cholera mitis
- b) Cholera dum dum
- c) Cholera magna
- d) Cholera gravis

d

32. Which of the following is the drug of choice of chemoprophylaxis of cholera?

- a) Tetracycline
- b) Doxycycline
- c) Furazolidone
- d) Contrimoxazole

a

33. Burkholderia is infrequently seen in:

- a) Pools
- b) Plants
- c) Soil
- d) Air

b

34. Malta fever is caused by:

- a) Treponema pallidum
- b) Brucella melitensis
- c) Borreliaburgdorferi
- d) Pseudomonas aeruginosa

b

35. Culture media of Leptospira:

- a) Korthoff
- b) Perkin
- c) Tinsdale
- d) Baker's

a

36. Which is Eaton agent?

- a) Mycoplasma
- b) H. Influenza
- c) Klebsiella
- d) Chlamydia pneumonia

a

37. Actinomyces israelii has following feature:

- a) Exogenous infection
- b) Branching filaments
- c) Aerobic
- d) Black granules

b

38. Sensitivity of urinary Antigen test of Legionella is:

- a) 80%
- b) 70%
- c) 95%
- d) 99%

b

39. Suckling mice is used for isolation of

- a) Coxsackie virus
- b) Herpes
- c) Pox
- d) Adenovirus

a

40. Which of the following viral disease is associated with reactivation?

- a) Pleurodynia
- b) Shingles
- c) Infectious mononucleosis
- d) Viral Arthritis

b

41. Which of the following is true regarding HPV vaccine strains?

- a) Monovalent Vaccine 6, 11, 16, 18, 31, 52, 56, 58 strains
- b) Monovalent Vaccine 6, 11, 16, 18, 31, 33, 45, 52, 58 strains
- c) 3 doses to girls if initiated prior to 15 years of age
- d) 2 doses recommended (6 months gap) between 9-14 years.

d

42. According to WHO's measles elimination strategy, vaccination campaigns are done in which phase?

- a) Mop up
- b) Follow up
- c) Keep up
- d) Catch up

d

43. A female became pregnant after 1 month of taking MMR vaccine: though was advised to avoid pregnancy. What advice the doctor would give to the patient?

- a) Termination of pregnancy is mandatory
- b) High risk of anomalies, serious consideration for termination
- c) Low risk, no action needed
- d) Wait and watch

d

44. Most virulent dengue fever strain is:

- a) 1
- b) 2
- c) 3
- d) 4

b

45. For the prevention of human rabies, immediate flushing and washing the wound in animal bite cases, with plenty of soap and water, under running tap should be carried out for how much time?

- a) 2 minutes
- b) 1 minute
- c) 15 minutes
- d) 5 minutes

c

46. Epidemiological marker in HBV infection:

- a) HBsAg
- b) HBeAg
- c) Anti HBe
- d) Anti HBs

a

47. Hepatitis C has the following characteristics feature in biopsy:

- a) Ground glass appearance
- b) Bridging necrosis
- c) Interface necrosis
- d) Lymphoid aggregates

d

48. Resistance to HIV infection occurs due to mutation of

- a) CCR 5
- b) CXCR4
- c) gp41
- d) gp120

a

49. Which of the following is used to prevent HIV transmission from an HIV positive pregnant mother to child

- a) Lamivudine
- b) Stavudine
- c) Nevirapine
- d) Didanosine

c

50. Ebola-type that is nonfatal in human beings is:

- a) Zaire
- b) Reston
- c) Cote d'Ivoire
- d) Bundibugyo

c

51. Color of granules produced by actinomycetes is:

- a) Black
- b) Yellow
- c) Blue
- d) White

d

52. DOC of *Pneumocystis jirovecii*

- a) Cotrimoxazole
- b) Penicillin
- c) Amphotericin B
- d) Clotrimazole

a

53. Which worm is longest?

- a) *T. solium*
- b) *T. saginata*
- c) Hookworm
- d) *A. lumbricoides*

b

54. Which is not causing neurodegeneration?

- a) Balamuthia
- b) Iodamoeba
- c) Naegleria
- d) Entamoeba

b

55. Girl visits her friend's village, develops nasal discharge, meningitis and dies in 5 days. Organism responsible is:

- a) *Naegleria fowleri*
- b) *Acanthamoeba*
- c) *Toxoplasma*
- d) *P. falciparum*

a

56. Reduviid bug is a vector for the transmission of:

- a) Relapsing fever
- b) Lyme's disease
- c) Scrub typhus
- d) Chagas disease

d

57. Espundia is a condition seen in:

- a) Endemic syphilis
- b) Malaria
- c) Lympho Granuloma Venereum
- d) Mucocutaneous Leishmaniasis

d

58. In patient with malaria, if patient has periodicity of 72 hours, which one of the following is likely to be causative agent?

- a) *P. falciparum*
- b) *P. vivax*
- c) *P. ovale*
- d) *P. malariae*

d

59. Post disaster, which of the following does not spread as epidemic?

- a) Leptospirosis
- b) Food Poisoning
- c) Leishmaniasis
- e) Rickettsia

c

60. Which of the following is not true regarding surveillance of water pollution?

- a) Multiple tube method is used to calculate the number of bacteria
- b) *E. coli* can be tested by indole test at 44°C
- c) Sodium thiosulfate is used to neutralize chlorine
- f) Presence of corynebacterium indicates recent contamination.

d