

Microbiology

- 1) Which type of the following biological vectors is responsible for transmission of malarial parasite-
- A) Cyclo-developmental
 - B) Propagative
 - C) Transovarial
 - D) Cyclo-propagative
-

- 2) Which of the parasites below is NOT having any intermediate host-
- A) *Hymenolepis diminuta*
 - B) *Clonorchis sinensis*
 - C) *Necator americanus*
 - D) *Loa loa*
-

- 3) Which of the following parasite DOES NOT belong to the class Coccidia-
- A) *Cryptosporidium*
 - B) *Isospora*
 - C) *Babesia*
 - D) *Cyclospora*
-

- 4) Which of the following is NOT correct-
- A) *E. histolytica* can be cultured on Boeck & Drbohlav's diphasic medium
 - B) *T. vaginalis* can be cultured on Trussell & Johnson's medium / CPLM
 - C) *L. donovani* can be cultured on Hockmeyer's medium
 - D) *T. cruzi* can be cultured on Weinman's medium
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- 5) DumDum fever is the name given to-
- A) Visceral leishmaniasis
 - B) New world leishmaniasis
 - C) South American trypanosomiasis
 - D) East African sleeping sickness
-

- 6) Montenegro test is used to diagnose-
- A) Kala azar
 - B) *Ecchinococcosis*
 - C) Chagas disease
 - D) Toxoplasmosis
-

- 7) Which of the following organisms can infect and multiply inside Protozoa-
- A) *Mycobacterium bovis*
 - B) *Mycobacterium avium*
 - C) *Mycobacterium xenopi*
 - D) *Mycobacterium simiae*
-

- 8) Oocysts of which of the following parasites are infective when passed in the faeces-
- A) *Cyclospora cayetenensis*
 - B) *Cryptosporidium parvum*
 - C) *Isospora belli*
 - D) All of the above

9) Fugitive or Calabar swellings are seen in infection with-

- A) *Onchocerca volvulus*
 - B) *Wuchereria bancrofti*
 - C) *Loa loa*
 - D) *Brugia timori*
-

10) River blindness is the name given to disease caused by-

- A) *Loa loa*
 - B) *Onchocerca volvulus*
 - C) *Toxoplasma gondii*
 - D) *Acanthamoeba culbertsoni*
-

11) Operculated eggs are seen in the following, EXCEPT-

- A) *Fasciola hepatica*
 - B) *Schistosoma japonicum*
 - C) *Clonorchis sinensis*
 - D) *Dipyllobothrium latum*
-

12) Which species of fungus *Microsporum* has characteristic two celled macroconidia-

- A) *Microsporum gypseum*
 - B) *Microsporum audouinii*
 - C) *Microsporum canis*
 - D) *Microsporum nanum*
-

13) Rose gardner's disease is caused by-

- A) *Paracoccidioides brasiliensis*
 - B) *Sporothrix schenckii*
 - C) *Penicillium marneffei*
 - D) *Coccidioides immitis*
-

14) Which *Candida* species is known to produce 'pseudo-germ tube'-

- A) *C. dubliniensis*
 - B) *C. tropicalis*
 - C) *C. albicans*
 - D) *C. krusei*
-

15) Which of the following fungus is NOT forming 'sclerotic bodies'-

- A) *Exophiala*
 - B) *Phialophora*
 - C) *Fonsecaea*
 - D) *Cladosporium*
-

16) Which of the following dermatophyte is giving a positive hair perforation test-

- A) *Trichophyton tonsurans*
 - B) *Trichophyton schoenleinii*
 - C) *Trichophyton mentagrophytes*
 - D) *Trichophyton verrucosum*
-

17) Which of the following is NOT causing eumycotic mycetoma-

- A) *Pseudoallescheria boydii*
- B) *Exophiala jeanselmei*
- C) *Acremonium kiliense*
- D) *Actinomyces*

18) Dichotomously branching septate hyphae are characteristically seen in-

- A) *Aspergillus* spp
 - B) *Rhizopus* spp
 - C) *Mucor* spp
 - D) *Absidia* spp
-

19) 'Spaghetti & meat balls' appearance of fungal elements in 10% KOH are characteristics of-

- A) *Hansenula anomala*
 - B) *Saccharomyces cerevisiae*
 - C) *Malassezia furfur*
 - D) *Exophiala werneckii*
-

20) Which of the following agent is a fungus-

- A) *Pneumocystis jirovecii*
 - B) *Cryptosporidium parvum*
 - C) *Eikenella corrodens*
 - D) *Ehrlichia chaffeensis*
-

21) 'Hülle cells' are the characteristic of-

- A) *Aspergillus fumigatus*
 - B) *Aspergillus nidulans*
 - C) *Aspergillus terreus*
 - D) *Aspergillus flavus*
-

22) In a case of meningitis a normal glucose level in C.S.F. suggests-

- A) Bacterial etiology
 - B) Mycobacterial etiology
 - C) Viral etiology
 - D) Fungal etiology
-

23) Which of the following is NOT true about *Staphylococcus saprophyticus*-

- A) Commonly causes UTI in young, sexually active, young females,
 - B) It is sensitive to Novobiocin
 - C) It is coagulase negative
 - D) It is modified oxidase test negative
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24) Griffith's serotyping of α -hemolytic streptococci is based on-

- A) Cell wall carbohydrate C antigen
 - B) Cell wall M protein
 - C) Cell wall peptidoglycan
 - D) Cell wall murein
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25) Which of the following is NOT true of *B. anthracis*-

- A) It produces Medusa head colony
 - B) It gives positive M'Fadyean's reaction
 - C) It is used as an agent of bioterrorism
 - D) It produces a potential endotoxin
-

26) Spores of which species of *Bacillus* is used as a biological control in autoclaves-

- A) *B. megaterium*
- B) *B. thuringiensis*
- C) *B. stearothermophilus*
- D) *B. anthracis*

27) Which clostridial species has subterminal endospores-

- A) *C. tetani*
 - B) *C. tertium*
 - C) *C. septicum*
 - D) *C. ramosum*
-

28) A reverse CAMP test is positive in-

- A) *C. tetani*
 - B) *C. perfringens*
 - C) *C. difficile*
 - D) *C. novyi*
-

29) Causative agent of granuloma inguinale is-

- A) *Chlamydia trachomatis*
 - B) *Klebsiella rhinoscleromatis*
 - C) *Mycoplasma hominis*
 - D) *Klebsiella granulomatis*
-

30) Pseudoheмоptysis is due to-

- A) Pyomelanin
 - B) Diphthericin
 - C) Prodigiosin
 - D) Fumonisin
-

31) Which of the following specimen is NOT suitable for anaerobic culture-

- A) Blood
 - B) Culdocentesis aspirate
 - C) Throat swab
 - D) Peritoneal fluid
-

32) Which of the following is NOT a constituent of bacterial cell wall-

- A) N-acetyl muramic acid
 - B) N-acetyl glucosamine
 - C) N-Acetyl-L-cysteine
 - D) Teichoic acid
-

33) Which of the following is NOT true-

- A) Transposons are extrachromosomal genetic elements
 - B) Transposons are known as jumping genes
 - C) Transposons can transfer genes of chromosomes
 - D) Like plasmids they exist independently and are self replicating
-

34) Non-specific urethritis may be caused due to the following, EXCEPT

- A) *Ureplasma urealyticum*
 - B) *Gardnerella vaginalis*
 - C) *Candida albicans*
 - D) *Actinobacillus hominis*
-

35) Which of the following is NOT true of *Listeria monocytogenes*-

- A) It does not survive inside phagocytes
- B) It gives a positive Anton's test
- C) It has tumbling motility at 25°C
- D) It gives a positive CAMP test

36) Which of the following is TRUE of the *Corynebacterium diphtheriae*-

- A) It produces diphtheria toxin because of phage
 - B) Toxin production is influenced by Mg^{++} concentration in the medium
 - C) Toxin mainly affects lungs and kidneys
 - D) Toxigenicity can be demonstrated in tissue culture
-

37) Culture of anaerobic organisms can be done by all ,EXCEPT-

- A) Gas-Pak
 - B) Candle jar
 - C) McIntosh & Fildes jar
 - D) Thioglycollate broth
-

38) Which of the following is NOT true of the Enterohaemorrhagic *E. coli* (EHEC)-

- A) The most common serotype is O157: H7
 - B) It can cause Hemolytic Uremic Syndrome
 - C) It ferments Sorbitol sugar in the medium
 - D) It produces toxin which is toxic to HeLa cell lines
-

39) Shigellosis includes all of the following, EXCEPT-

- A) Hemolytic Uremic Syndrome
 - B) Gay-bowel syndrome
 - C) Fitz-Hugh-Curtis syndrome
 - D) Intussusception of bowel
-

40) According to current W.H.O. classification of genus *Salmonella*, there are mainly two species-

- A) *S. enterica* & *S. arizonae*
 - B) *S. arizonae* & *S. enteritidis*
 - C) *S. bongori* & *S. enterica*
 - D) *S. bongori* & *S. typhi*
-

41) Gram stained smear of *Vibrios* in mucus flakes of stool specimen resembles-

- A) School of fish appearance
 - B) Fish in stream appearance
 - C) Sea-gull appearance
 - D) String of pearls appearance
-

42) Which of the following organisms is responsible for Brazilian Purpuric Fever (BPF)-

- A) *Hemophilus hemolyticus*
 - B) *Hemophilus aphrophilus*
 - C) *Hemophilus aegyptius*
 - D) *Hemophilus parainfluenzae*
-

43) Which of the organisms below does NOT liquefy gelatin-

- A) *Morganella morganii*
 - B) *Bacillus subtilis*
 - C) *Proteus vulgaris*
 - D) *Staph. aureus*
-

44) Which one of the following are NOT related to each other-

- A) Nagler's reaction & *Clostridium perfringens*
- B) Nissl's bodies & Polio virus
- C) Tunica reaction & *Rickettsia prowazekii*
- D) Rat bite fever & *Streptobacillus moniliformis*

45) Which of the following is NOT commonly seen in HIV infected patients-

- A) Bacillary angiomatosis
 - B) Generalised Strongyloidiasis
 - C) Cryptosporidiosis
 - D) Leptospirosis
-

46) Which of the following organisms is NOT associated with bloody diarrhea-

- A) *Shigella dysenteriae*
 - B) *Campylobacter fetus*
 - C) *Clostridium difficile*
 - D) *B.anthraxis*
-

47) Which of the following is NOT a cell wall constituent of mycobacteria-

- A) N-acetylmuramic acid
 - B) N-glycolylmuramic acid
 - C) Mycolic acid
 - D) Teichoic acid
-

48) Which of the following is a member species of *Mycobacterium tuberculosis* complex-

- A) *M.ulcerans*
 - B) *M.gordonae*
 - C) *M.africanum*
 - D) *M.kansasii*
-

49) Which of the following *Mycobacterium* is a causative agent of Buruli-ulcer -

- A) *M.avium intracellulare*
 - B) *M.xenopi*
 - C) *M.ulcerans*
 - D) *M.malmoense*
-

50) Which of the following is NOT a characteristic of *Mycoplasma*-

- A) They belong to the class Mollicutes
 - B) They require sterols for their growth
 - C) Their cell wall contains diaminopimelic acid
 - D) Their colonies have "Fried egg" appearance
-

51) Which of the following is NOT related to each other-

- A) Ixodides tick and Babesiosis
 - B) Ixodides tick and Lyme disease
 - C) Ixodides tick and Endemic relapsing fever
 - D) Ixodides tick and Tularemia
-

52) Which of the following is NOT true of *Actinomyces*-

- A) These are strictly aerobic gram positive branching filaments
 - B) They produce sulphur granules
 - C) They cause Actinomycetoma
 - D) They are Non acid fast
-

53) Which of the following is a high level disinfectant-

- A) Phenol
- B) Gluteraldehyde
- C) Iodophors
- D) Chlorhexidine

54) Which of the following is correct-

- A) Ebola virus is BSL 4 agent and requires Class III BSC to handle in the laboratory
 - B) Ebola virus is BSL 4 agent and requires Class II B3 BSC to handle in the laboratory
 - C) Ebola virus is BSL 3 agent and requires Class III BSC to handle in the laboratory
 - D) Ebola virus is BSL 1 agent and requires Class I BSC to handle in the laboratory
-

55) Which of the following virus is NOT transmitted through blood-

- A) CMV
 - B) HCV
 - C) BK virus
 - D) Parvovirus B19
-

56) The maximum permissible bioload in an empty conventional operation theatre should be-

- A) 10 bcp/m³
 - B) 35 bcp/m³
 - C) 50 bcp/m³
 - D) 100 bcp/m³
-

57) In hospital settings air conditioning ducts and cooling towers can be a source of hospital acquired Infection due to-

- A) Methicillin resistant Staph aureus
 - B) Mycobacterium scrofulaceum
 - C) Legionella pneumophila
 - D) Aeromonas hydrophila
-

58) The proper biomedical waste policy for disposal of Human anatomical and animal waste would be-

- A) Segregation in red bag and deep burial
 - B) Segregation in yellow bag and incineration
 - C) Segregation in puncture proof container and microwaving
 - D) Segregation in blue bag and autoclaving
-

59) Emerging and re-emerging infectious diseases are characterized by all, EXCEPT-

- A) They have appeared for the first time or existed previously and presently increasing in incidence or Geographical range
 - B) They have developed resistance to drugs
 - C) They are the result of increasing change in ecosystem, deforestation
 - D) They are seldom of Zoonotic origin
-

60) All of the following are vaccine preventable diseases (VP), EXCEPT-

- A) Measles
 - B) Hepatitis B
 - C) Dengue
 - D) Pertussis
-

61) Involution forms of bacteria are seen in-

- A) Log phase of bacterial growth curve
 - B) Stationary phase of bacterial growth curve
 - C) Decline phase of bacterial growth curve
 - D) Lag phase of bacterial growth curve
-

62) Which mechanism of drug resistance to Tetracyclines is exhibited by bacteria-

- A) Active efflux of antibiotic
- B) Altered target enzymes
- C) Poor transport across membrane
- D) Altered ribosomal targets

63) By matching bacterial suspension with 0.5 McFarland turbidity standard corresponds to-

- A) $0.5-1 \times 10^5$ cfu/ml
 - B) $1-2 \times 10^8$ cfu/ml
 - C) $2-3 \times 10^8$ cfu/ml
 - D) $1-2 \times 10^5$ cfu/ml
-

64) The Electron microscope was developed by-

- A) Wright 1903
 - B) Frederick W. Twort 1915
 - C) Ernst Ruska 1934
 - D) Frank Burnet 1957
-

65) Which of the following is NOT true -..

- A) Bollinger bodies are seen in measles virus infection
 - B) Negri bodies are seen in Rabies virus infection
 - C) Guarnieri bodies are seen in vaccinia virus infection
 - D) Cowdry type A bodies are seen in Yellow fever virus infection
-

66) Owl's eye inclusion bodies are seen in-

- A) Tanapox virus
 - B) Epstein Barr virus
 - C) Cytomegalovirus
 - D) Mumps virus
-

67) Which of the following is NOT oncogenic-

- A) Hepatitis C virus
 - B) Human Papilloma virus
 - C) Cytomegalo virus
 - D) HIV
-

68) Which of the following is NOT a gene of HIV-1-

- A) Nef
 - B) Vpx
 - C) Rev
 - D) Vif
-

69) Which of the following is NOT a human infection cause by slow viruses-

- A) Visna
 - B) PML
 - C) Kuru
 - D) CJ disease
-

70) Which of the following antiviral agent is part of HAART(Highly Active Antiretroviral Therapy)-

- A) Lamivudine
 - B) Amprenavir
 - C) Saquinavir
 - D) Delavirdine
-

71) Acute and highly infectious Hepatitis B Virus infection will have serological profile as-

- A) HBsAg +, HBeAg +, Anti-HBcIgM -, Anti-HBs -, Anti-HBe -
- B) HBsAg +, HBeAg +, Anti-HBcIgM +, Anti-HBs -, Anti-HBe -
- C) HBsAg -, HBeAg-, Anti-HBcIgM -, Anti-HBs +, Anti-HBe -
- D) HBsAg -, HBeAg -, Anti-HBcIgG -, Anti-HBs +, Anti-HBe +

72) Lesions on genitalia in case of Chancroid have characteristic features of-

- A) It is painless, circumscribed, indurated, superficial ulcer
 - B) Multiple painful and tender vesicular lesions
 - C) Painless, granulomatous nodule producing deep red sharply defined ulcer
 - D) Multiple, tender, painful, purulent, ragged edges of ulcers
-

73) Which of the following is NOT causing infection in fetuses-

- A) Toxoplasma gondii
 - B) Parvovirus B19
 - C) Reovirus
 - D) Rubella virus
-

74) Which of the following viruses are NOT cultivable on tissue cultures-

- A) Rubeola
 - B) Hepatitis B virus
 - C) Respiratory Syncytial Virus
 - D) Ebola virus
-

75) Which of the following statement regarding sensitivity and specificity of a test is TRUE-

- A) A highly sensitive test would have least number of false negative results
 - B) A highly specific test would have least number of false negative results
 - C) A poorly sensitive test would have more number of true positives
 - D) A poorly specific test would have more number of true positives
-

76) Von Magnus phenomenon in virus replication is-

- A) Production of non-infective daughter virions
 - B) No release of daughter virions after replication
 - C) Production of ghost virions after replication
 - D) Production of low infectivity daughter virions
-

77) Which of the following cells is known as Large Granular Lymphocytes-

- A) Plasma cells
 - B) NK cells
 - C) T-cells
 - D) K-cells
-

78) Which of the following is a Pan T- cell marker-

- A) CD-2
 - B) CD3
 - C) CD19
 - D) CD25
-

79) Which of the following is NOT a tick borne hemorrhagic fever-

- A) Crimean-congo hemorrhagic fever
 - B) Omsk hemorrhagic fever
 - C) Kyasanur forest disease
 - D) Yellow fever
-

80) Which of the following statement is TRUE about κ and heavy chains of Ig molecule-

- A) Coded in the same site of a chromosome
- B) Coded in the different site of a chromosome
- C) The chains are formed by genetic rearrangement after maturation
- D) Different chains of same Ig are coded by same chromosome

81) The secretory piece of IgA is synthesized in –

- A) T-cells
 - B) B-cells
 - C) Lymph nodes
 - D) Mucosal epithelium
-

82) Membrane attack complex in complement pathway has-

- A) C5b, C6
 - B) C6, C7
 - C) C8, C9
 - D) C5b, C6, C7, C8, C9
-

83) All of the following are TRUE about immunologic techniques EXCEPT-

- A) ELISA can detect antigen and antibody both
 - B) Immunofluorescence test uses Fluorescein iso thiocyanate
 - C) Immunoblotting is also called as Northern blotting
 - D) Immunoferritin is used in Immunoelectron microscopy
-

84) Rheumatoid factor is-

- A) IgD antibody against Fc fragment of IgG
 - B) IgG antibody against Fc fragment of IgG
 - C) IgM antibody against Fc fragment of IgM
 - D) IgE antibody against Fc fragment of IgM
-

85) At what temperature pasteurization by Flash method is done-

- A) 125° C for 30 sec
 - B) 60° C for 5 min
 - C) 72° C for 15-20 sec
 - D) 120° C for 2 min
-

86) Phenol Co-efficient indicates-

- A) Efficacy of a disinfectant
 - B) Dilution of a disinfectant
 - C) Quality of a disinfectant
 - D) Purity of a disinfectant
-

87) Psychrophilic bacteria can grow at temperatures-

- A) 50-60° C
 - B) 20-40° C
 - C) 20° C
 - D) 90° C
-

88) Dark ground microscopy is needed for all EXCEPT-

- A) *Treponema pallidum*
 - B) *Borrelia recurrentis*
 - C) *Leptospira biflexa*
 - D) *Rickettsia prowazekii*
-

89) Which species of *Streptococcus* is known as Flesh eating bacteria-

- A) *Streptococcus pyogenes*
- B) *Enterococcus faecium*
- C) *Streptococcus mucilagenosus*
- D) *Streptococcus sanguis*

90) Which is the suitable test to check water bacteriology-

- A) Presumptive coliform count
 - B) Total plate count
 - C) Semiquantitative coliform count
 - D) Total fecal Streptococcus count
-

91) Which of the following is NOT true of C1 esterase inhibitor-

- A) It inhibits Hageman factor
 - B) It inhibits plasmin
 - C) It is alpha-neuraminoglycoprotein
 - D) It inhibits the normal progress of complement cascade
-

92) Which of the following is NOT an example of molecular mimicry-

- A) Shigella flexneri and HLA B27
 - B) Cosackie B virus and Myocardium
 - C) Corynebacterium diphtheriae and glial cells
 - D) Mycobacterium tuberculosis and joint membranes
-

93) Which of the following is NOT true -

- A) Alpha feto protein is found in hepatomas
 - B) Carcinoembryonic antigen is found in Colonic cancers
 - C) CA-135 is found in ovarian cancers
 - D) Prostate specific antigen is found in Prostate cancers
-

94) Which of the following is NOT a method for bacteriological examination of air-

- A) Settle plate
 - B) Slit sampler
 - C) Air centrifuge
 - D) Pour plate method
-

95) Noguchi's medium is used for the culture of-

- A) Borrelia
 - B) Leptospira
 - C) Brucella
 - D) Francisella
-

96) Obligate aerobes break down superoxides and hydrogen peroxide due to-

- A) Thermonuclease
 - B) Superoxide dismutase and catalase
 - C) Phosphatase
 - D) Luciferase
-

97) Which of the following is NOT a recent diagnostic test in microbiology-

- A) Limulus Amoebocyte Lysate(LAL)
 - B) Mass Spectrometry Immuno Assay
 - C) Matrix Assisted Laser Desorption/Ionisation(MALDI)
 - D) Chemiluminescence Immuno Assay
-

98) Which of the following is an immune complex disease-

- A) Lepromatous leprosy
- B) Farmer's lung
- C) Hemolytic disease of the newborn
- D) Adult Respiratory Distress Syndrome

99) A parasite that must spend at least part of its life cycle on or in a host is called-

- A) Facultative parasite
 - B) Hyperparasite
 - C) Obligate parasite
 - D) Pathogenic parasite
-

100) The schedule of post exposure active anti Rabies vaccination is-

- A) 0,3,7,14 and 30 day optional
- B) 0,7,14,30 and 90 day optional
- C) 0,3,7,14,30 and 90 day optional
- D) 0,7,14 and 30 day optional