1) Neonatal thymectomy leads to:
A. Decreased size of germinal center
B. Decreased size of paracortical areas
C. Increased antibody production by B cells
D. Increased bone marrow production of lymphocytes

2) Staphylococcus aureus differs from Staphylococcus epidermidis by:
A. Is coagulase positive
B. Forms white colonies
C. A common cause of UTI
D. Causes endocarditis in drug addicts

3) Positive Shick’s test indicates that person is:
A. Immune to diphtheria
B. Hypersensitive to diphtheria
C. Susceptible to diphtheria
D. Carrier of diphtheria

4) In a patient with typhoid, diagnosis after 15 days of onset of fever is best done by:
A. Blood culture
B. Widal
C. Stool culture
D. Urine culture

Q 5). Which of the following is transmitted by rat urine?
A. Leptospira
B. Listeria
C. Legionella
D. Mycoplasma

Q 6). All the following are true about Listeria except:
A. Transmitted by contaminated milk
B. Gram negative bacteria
C. Causes abortion in pregnancy
D. Causes meningitis in neonates

Q 7). Which of the following statement is true about Bacteroides:
A. It is gram positive bacilli
B. It is strictly aerobic
C. It may cause peritonitis
D. Presence in stool culture indicates need for treatment

Q 8). Heat stable enterotoxin causing food poisoning is caused by all the following except:
A. Bacillus cereus
B. Yersinia enterocolitica
C. Staphylococcus
D. Clostridium perfringens

Q 9). HIV virus contains:
A. Single stranded DNA
B. Single stranded RNA
C. Double stranded DNA
D. Double stranded RNA

Q 10). Regarding HIV which of the following is not true:
A. It is a DNA retrovirus
B. Contains reverse transcriptase
C. May infect host CD4 cells other than T-lymphocytes
D. Causes a reduction in host CD4 cells at late stage of disease

Q 11 CMV retinitis in HIV occurs when the CD4 counts fall below:
A. 50
B. 100
C. 200
D. 150

Q 12. Epstein Barr virus causes all the following except:
A. Infectious mononucleosis
B. Measles
C. Nasopharyngeal carcinoma
D. Non Hodgkin’s lymphoma

Q 13. In a patient, corneal scraping reveals narrow angled septate hyphae. Which of the following is the likely etiologic agent:
A. Mucor
B. Aspergillus
C. Histoplasma
D. Candida

Q 14. Which of the following is true regarding globi in a patient with lepromatous leprosy:
A. Consists of lipid laden macrophages.
B. Consists of macrophages filled with AFB
C. Consists of neutrophils filled with bacteria
D. Consists of activated lymphocytes

Q 15. The following diagnostic tests are useful for corresponding purposes except:
A. Zeil-Neelson staining – Detection of mycobacteria
B. Immunoflorescence – Detection of influenza virus
C. Specific IgM antibodies – Immunity against rubella
D. Specific IgM antibodies – Detection of acute infection

Q 16. IL-1 produces:
A. T lymphocyte activation
B. Delayed wound healing
C. Increased pain perception
D. Decreased PMN release from bone marrow

Q 17. Calcium dipicolinate is found in
A. Aspergillus
B. Bacillus
C. Escherichia
D. Rickettsia
Q 18. Confirmation of diagnosis of rota virus infection is by:
A. Antigen detection in stool by ELISA
B. Antibody titres in serum
C. Antigen detection by immunofluorescence
D. Antigen detection in serum by ELISA

Q 19. An anxious mother brought her 4 year old daughter to the pediatrician. The girl was passing loose bulky stools for the past 20 days. This was often associated with pain in abdomen. The pediatrician ordered the stool examination which showed the following organisms.
Identify the organism:
A. Entamoebahistolytica
B. Giardia lamblia
C. Cryptosporidium
D. E. coli

Q 20. A section of tissue from the foot of a person assumed to have eumycoticmycetoma shows a white, lobulated granule composed of fungal hyphae. The most common etiologic agent of this condition is a species of which of the following?
A. Acremonium
B. Actinomyces
C. Madurella
D. Pseudallescheria

Q 21. Major cause of favus is
A. M. canis
B. E. floccosum
C. T. rubrum
D. T. schoenlenii

Q 22. Brown, spherical, septate bodies form pus are diagnostic of
A. Sporotrichosis
B. Mucormycosis
C. Geotrichosis
D. Chromoblastomycosis

Q 23. A chest physician performs bronchoscopy in the procedure room of the out patient department. To make the instrument safe for use in the next patient waiting outside, the most appropriate method to disinfect the endoscope is by:
A. 70% alcohol for 5 min.
B. 2% glutaraldehyde for 20 min.
C. 2% formaldehyde for 10 min.
D. 1% sodium hypochlorite for 15 min.

Q 24. Which of the following statements is true about rabies virus:
A. It is a double stranded RNA virus.
B. Contains a DNA-dependent RNA polymerase.
C. RNA has a negative polarity
D. Affects motor neurons.

Q 25. Which of the following statements is true about endemic typhus:
A. Is caused by R. rickettsii.
B. Is transmitted by the bite of fleas.
C. Has no mammalian reservoir.
D. Can be cultured in chemical defined culture medium.

Q 26. A renal transplant patient was admitted for graft rejection and pneumonia. A routine evaluation of his stool showed rhabditiform larvae. Subsequent follow-up revealed similar worms in his sputum. He had no eosinophils in his peripheral circulation. What is the most likely organism?
A. Ascaris
B. Hymenolepis
C. Loa Loa
D. Strongyloides

Q 27. Regarding NK cells, false statement is:
A. It is activated by IL-2
B. Expresses CD 3 receptor
C. It is a variant of large lymphocyte
D. There is antibody induced proliferation of NK cells

Q 28. Adenosine deaminase deficiency is seen in the following:
A. Common variable immunodeficiency.
B. Severe combined immunodeficiency
C. Chronic granulomatous disease
D. Nezelof syndrome

Q 29. A beta hemolytic bacteria is resistant to vancomycin, shows growth in 6.5% NaCl, is non-bile sensitive. It is likely to be:
A. Strep. agalactiae
B. Strep. pneumoniae
C. Enterococcus
D. Strep. bovis

Q 30. The best site to obtain a swab in asymptomatic gonorrhea is
a) Endocervix
b) Urethra
c) Lateral vaginal wall
d) Posterior fornix

Q 32. Toxin involved in the streptococcal toxic shock syndrome is:
A. Pyrogenic toxin
B. Erythrogenic toxin
C. Hemolysin
D. Neurotoxin
Q 33. A child presents with a white patch over the tonsils; diagnosis is made early by culture in:
A. Loeffler medium
B. LJ medium
C. Blood agar
D. Tellurite medium

Q 34. A patient with 14 days of fever is suspected of having typhoid. What investigation should be done:
A. Blood culture
B. Widal test
C. Stool culture
D. Urine culture

Q 35. All are true about EHEC except:
A. Sereny test is positive
B. Fails to ferment sorbitol
C. Causes HUS
D. Elaborates shiga like exotoxin

Q 36. An organism grown on agar shows green coloured colonies, likely organism is:
A. Staphylococcus
B. E. coli
C. Pseudomonas
D. Peptostreptococcus

Q 37. Congenital syphilis can be best diagnosed by:
A. IgM FTAbs
B. IgG FTAbs
C. VDRL
D. TPI

Q 38. All are features of Ureaplasmaauraleyticum except:
A. Non gonococcal urethritis
B. Salpingitis
C. Epididymitis
D. Bacterial vaginosis

Q 39. Regarding HIV infection, not true is:
A. p24 is used for early diagnosis
B. Lysis of infected CD 4 cells is seen
C. In India most infections are of HIV II
D. Macrophage is a reservoir for the virus

Q 40. A pregnant woman from Bihar presents with hepatic encephalopathy. The likely diagnosis:
A. Hepatitis E
B. Hepatitis B
C. Sepsis
D. Acute fatty liver of pregnancy

Q 41. Virus causing hemorrhagic cystitis, diarrhea and conjunctivitis is:
A. RSV
B. Rhinovirus
C. Adenovirus
D. Rotavirus

Q 42. Cystine lactose enzyme deficient (CLED) medium is preferred over McConkey agar in UTI because:
A. Former prevents swarming of proteus
B. Is a selective medium
C. Prevents growth of pseudomonas
D. Promotes growth of candida

Q 43. HACEK group
a) Haemophilus aphrophilus
b) Acinetobacter Baumanii
c) klebsiella pneumonia
d) Staphylococcus aureus

Q 44. Bile duct carcinoma is caused by:
A. Fasciola
B. Clonorchis
C. Paragonimus
D. None

Q 45. All of the following are true except:
A. E.coli is an aerobe and facultative anaerobe
B. Proteus forms uric acid stones
C. E. coli is motile by peritrichate flagella
D. Proteus causes deamination of phenylalanine to phenylpyruvic acid

Q 46. Consumption of uncooked pork is likely to cause which of the following helminthic disease:
A. Tineasaginata
B. Tineasolium
C. Hydatid cyst
D. Trichuristrichura

Q 47. A woman with infertility receives an ovary transplant from her sister who is an identical twin. What type of graft it is?
A. Xenograft
B. Autograft
C. Allograft
D. Isograft.

Q 48. Virus mediated transfer of host DNA from one cell to another is known as:
A. Transduction.
B. Transformation.
C. Transcription.
D. Integration.
Q 49. In the small intestine, cholera toxin acts by:
A. ADP-ribosylation of the G regulatory protein.
B. Inhibition of adenyl cyclase.
C. Activation of GTPase.
D. Active absorption of NaCl.

Q 50. HIV can be detected and confirmed by:
A. Polymerase chain reaction (PCR)
B. Reverse transcriptase - PCR
C. Real time PCR
D. Mimic PCR.

Q 51. With reference to infections with Escherichia coli the following are true except:
A. Enterotoaggregative E. coli is associated with persistent diarrhoea.
B. Enterohemorrhagic E.coli can cause haemolyticuraemic syndrome.
C. Enteroinvasive E. coli produces a disease similar to salmonellosis.
D. Enterotoxigenic E.coli is a common cause of travellers diarrhoea.

Q 52. The following statements are true regarding melioidosis except:
A. It is caused by Burkholderia mallei.
B. The agent is a grain negative aerobic bacteria.
C. Bipolar staining of the aetiological agent is seen with methylene blue stain.
D. The most common form of melioidosis is pulmonary infection.

Q 53. The following bacteria are most often associated with acute neonatal meningitis except:
A. Escherichia coli.
B. Streptococcus agalactiae.
C. Neisseria meningitidis.
D. Listeria monocytogenes.

Q 54. All of the following Vibrio sp. are halophilic, except:
A. V. cholerae.
B. V. parahaemolyticus.
C. V. alginolyticus.
D. V. vulnificus.

Q 55. All of the following organisms are known to survive intracellularly except:
A. Neisseria meningitides.
B. Salmonella typhi.
C. Streptococcus pyogenes.
D. Legionella pneumophila.

Q 56. The capsule of Cryptococcus neoformans in a CSF sample is best seen by:
A. Grams stain.

Q 57. Viruses can be isolated from clinical samples by cultivation in the following except:
A. Tissue culture.
B. Embryonated eggs.
C. Animals.
D. Chemically defined media.

Q 58. It is true regarding the normal microbial flora present on the skin and mucous membranes that:
A. It cannot be eradicated by antimicrobial agents.
B. It is absent in the stomach due to the acidic pH.
C. It establishes in the body only after the neonatal period.
D. The flora in the small bronchi is similar to that of the trachea.

Q 59. An army jawan posted in a remote forest area had fever and headache. His fever was 104°F and pulse was 70 per min. He had an erythematous lesion of about 1 cm on the leg surrounded by small vesicles, along with generalized lymphadenopathy at the time of presentation to the referral hospital. His blood sample was collected to perform serology for the diagnosis of Rickettsial disease. Which one of the following results in Weil-Felix reaction will be diagnostic in this clinical setting:
A. High OX-2.
B. High OX-19.
C. High OX-K.
D. High OX-19 and OX-2.

Q 60. Adenosine deaminase (enzyme) deficiency is associated with:
A. Severe combined immunodeficiency (SCID)
B. X-linked agammaglobulinemia.
C. Transient hypogammaglobulinemia of infancy.
D. Chronic granulomatous disease.

Q 61. Which of the following viral infections is transmitted by tick?
A. Japanese encephalitis.
B. Dengue fever.
C. Kyasanur forest disease (KFD).
D. Yellow fever.

Q 62. Atypical pneumonia can be caused by the following microbial agents except:
A. Mycoplasma pneumoniae.
B. Legionella pneumophila.
C. Human Corona virus.
D. Klebsiellapneumoniae.

Q 63. The serum concentration of which of the following human IgG subclass is

B. India ink preparation.
C. Giemsa stain.
D. Methanamine-silver stain.
maximum?
A. IgG1.
B. IgG2.
C. IgG3.
D. IgG4.

Q 64. Chlamydia trachomatis is associated with the following except:
A. Endemic trachoma.
B. Inclusion conjunctivitis.
C. Lymphogranulomavirus.
D. Community acquired pneumonia.

Q 65. The following statements are true regarding Clostridium perfringens except:
A. It is commonest cause of gas gangrene.
B. It is normally present in human faeces.
C. The principal toxin of C. perfringens is the alpha toxin.
D. Gas gangrene producing strains of C. perfringens produce heat resistant spores.

Q 66. The most common organism amongst the following that causes acute meningitis in an AIDS patients is:
A. Streptococcus pneumoniae.
B. Streptococcus agalactiae.
C. Cryptococcus neoformans.
D. Listeria monocytogenes.

Q 67. A bacterial disease that has been associated with the 3 “Rs” i.e., rats, ricefields, and rainfall is:
A. Leptospirosis.
B. Plague.
C. Melioidosis.
D. Rodent-bite fever.

Q 68. A child was diagnosed to be suffering from diarrhoea due to Campylobacter jejuni. Which of the following will be the correct environmental conditions of incubation of the culture plates of the stool sample:
A. Temperature of 42°C and microaerophilic.
B. Temperature of 42°C and 10% carbon dioxide.
C. Temperature of 37°C and microaerophilic.
D. Temperature of 37°C and 10% carbon dioxide.

Q 69. Which one of the following statements is true regarding Chlamydia pneumoniae:
A. Fifteen serovars have been identified as human pathogens.
B. Mode of transmission is by the airborne bird excreta.
C. The cytoplasmic inclusions present in the sputum specimen are rich in glycogen.
D. The group specific antigen is responsible for the production of complement fixing antibodies.

Q 70. Type I hypersensitivity is mediated by which of the following immunoglobulins?
A. IgA.
B. IgG.
C. IgM
D. IgE.

71) Hydatid cyst is commonly found in
A. liver
B. lungs
C. kidney

72 Most common site of abscess formation due to Amoeba
A. liver
B. Lungs
C. kidney

73) A 36 year old male patient has an abscess with a strain of MRSA. This indicates organism is resistant to which antibiotics
A. Meropenem
B. Trimethoprim – sulphonamethoxazole
C. Azithromycin
D. Amikacin.

74 Which of the following is not capsulated?
A. Bacillus anthrax
B. Clostridium perfringes
C. Pneumococcus
D. vibriocholerae

75) All the following statements about bacillus anthrax are true except
(a) selective media is PLET media
(b) It is a capsulated bacilli and capsule is of lipopolysacchride in nature
(c) it is non motile
(d) Ascoli’s thermoprecipitin test is done to diagnose

76) all occurs in botulism except
(a) Diplopia
(b) Dysphagia
(c) Diarrhoea
(d) Dysarthria

77) True regarding pseudomembranous colitis are all except
(a) it is caused by clostridium difficle
(b) the organism is a normal commensal of gut
(c) it is due to production of phospholipase A
(d) it is treated by Vancomycin

78) Metachromatic granules are seen in
(a) Corynebacteria
(b) Clostridium
(c) Chlamydia
79) The mechanism of action of exotoxin produced by Corynebacteriadiaphtheriae can be characterized by which of the following? 
(a) Acting as a super antigen that binds to MHC class II protein and the T cell receptor 
(b) Blocking the release of acetylcholine causing anticholinergic symptoms 
(c) Blocking the release of glycine (inhibitory neurotransmitter) 
(d) inhibits protein synthesis via EF-2 adenosine diphosphate (ADP) ribosylation.

80) Nocardia resemble actinomyces in all of the following features except: 
(a) They are anaerobic 
(b) They are aerobic 
(c) They are facultative anaerobic 
(d) They require Co2 for growth.

81) A 3-year-old girl with a history of hydrocephalus and a severe headache and fever. The girl underwent a revision of a ventricular-peritoneal shunt 1 month ago, and the neurologist suspects that an infection has occurred. Which of the following organisms would most likely be isolated from the shunt tubing? 
(a) Bacteroides fragilis 
(b) Corynebacterium diphtheriae 
(c) Escherichia coli 
(d) Staphylococcus epidermidis.

82) All of the following statements are true about bacteriophage except 
(a) It is a virus that infects bacteria 
(b) It helps in transduction of bacteria 
(c) It imparts toxigenicity to bacteria 
(d) It transfers only chromosomal gene.

83) Negative acute phase protein is 
(a) Haptoglobin 
(b) C-Reactive protein 
(c) Albumin 
(d) Ceruloplasmin.

84) Superantigens are produced by all the following except 
(a) Staphylococcus aureus 
(b) Enterococcus faecalis 
(c) Rabies virus 
(d) HIV.

85) Segmented RNA is found is 
(a) Influenza virus 
(b) Herpes virus 
(c) Rabies virus 
(d) Measles virus.

86) Risk of hepatitis B virus infection following percutaneous exposure is - 
(a) 6-30% 
(b) 0-3% 
(c) 3-9% 
(20-25%)

87) Which is true about Arboviral disease 
(a) Yellow fever is endemic in India 
(b) Dengue viruses have only one sero type 
(c) KFD is transmitted by tick 
(d) Japanese encephalitis is transmitted by Aedes.

88) Which of the following is not acid fast 
(a) Nocardia 
(b) Rhodococcus 
(c) Cryptococcus 
(d) Legionella micdadei.

89) Which of the following don’t have safety pin appearance 
(a) pseudomonas mallei 
(b) pseudomonas pseudomallei 
(c) Vibrio vulnificus 
(d) Donovanigranulomatis.

90) Subterminal spores are seen in 
(a) clostridium perfringens 
(b) clostridium sporogenes 
(c) clostridium tertium 
(d) clostridium botulinum.

91) A Pap smear from a woman with chronic cervicitis shows cytoplasmic inclusions within epithelial cells. Fluorescent antibodies identify both these inclusions and "elementary bodies." The intracellular organisms causing the infection are unusual because they cannot synthesize which of the following? 
A. ATP 
B. Cholesterol 
C. DNA 
D. Proteins.

92) Cataracts and patent ductus arteriosus in a newborn suggests in utero infection with which viral family? 
(a) Adenovirus 
(b) Paramyxovirus 
(c) Togavirus 
(d) Picornavirus.

93) A 3 yr. old child develops bloody diarrhea. Haemorrhagic colitis due to E. coli 0157:H7 is suspected. What medium
should be inoculated to help the lab staff make the diagnosis of this infection
A TCBS
B. Sorbitol Mac Conkey Agar
C. Modified Thayer Martin medium
D. Chocolate agar

94). Protein A of S. aureus
a. Activates of the alternative complement pathway
b. Plays no role in host-parasite relationship
c. Binds to Fc region of IgM
d. Is used in coagglutination test

95) During the window period of patient with AIDS
a) ELISA – VE
b) Western Blot – ve
c) both are – ve
d) PCR – ve

96) incubation period of HBV is period
a) 45 to 180 days
b) 6 to 60 days
c) 10 days
d) 10 hrs

97) A recent Hepatitis B infection is confirmed by demonstration of serum
a) HBsAg
b) HBCaG
c) IgM Anti HBCaG and HBsAg
d) Anti HBs Ab

98) Which of the following viruses is cultivable
(a) HAV
(b)HBV
(c) HDV
(d) HEV

99) Von Magnus phenomenon
a) it is a normal replicative cycle
b) Virus yield has low hemagglutination
c) virus has high infectivity
d) Virus yields has high haemagglutination titre but low infectivity

100) Double stranded RNA is seen in
a) Reo virus
b) rhabdovirus
c) Parvo virus
d) Retro virus

101) Stalactite growth in ghee broth is due to
a) H.influenzae
b) C.diphtheriae
c) Y.pestis
d) T.pallidium

102) Buruli ulcer is caused by
a) Mycobacterium ulcerans
b) Mycobacterium marinum
c) Mycobacterium kansasii
d) Mycobacterium fortuitum

103) Eosinophilic meningoencephalitis is caused by
a) Angiostrongylus cantonensis
b) Capillaria
c) Naegleria
d) Toxocara canis

104) Reinfecion tuberculosis affects which of the following region of lung
(a) Lower part of upper lobe
(b) Hiilar region
(c) Apical region
(d) Upper part of lower lobe

105) Non bile stained egg is found in
(a) Ancylostoma duodenale
(b) Trichuristrichura
(c) Ascaris lumbricoides
(d) All of the above