

Registration No. 121(34018/2014)

1. Minimum inhibitory concentration (MIC)
  - a) Lowest concentration of antimicrobial agent that kills 99.9% of the inoculum
  - b) Kirby-Bauer method is the most commonly used method to achieve it
  - c) Expressed in mmol/L
  - d) A standard inoculum of 0.5 McFarland is used
  - e) Requires 72 hours of incubation for results to be apparent
  
2. *Bordetella bronchiseptica*
  - a) Non-motile
  - b) Strict anaerobe
  - c) Forms spores
  - d) Urease positive
  - e) Obligate human pathogen
  
3. *Brucella* species
  - a) Have a high infectious dose
  - b) Commonest mode of transmission to humans is via droplets
  - c) Obligate anaerobes
  - d) Macrophages are their prime targets
  - e) Amoxicillin-clavulanic acid is the drug of choice
  
4. Which of the following only requires the X factor for growth
  - a) *Haemophilus influenzae* serotype c
  - b) *Haemophilus influenzae* biotype aegyptius
  - c) *Haemophilus ducreyi*
  - d) *Haemophilus parainfluenzae*
  - e) *Haemophilus parahaemolyticus*
  
5. *Yersinia pestis*
  - a) Obligate intracellular organism
  - b) Exhibits bipolar staining
  - c) Motile
  - d) Small gram positive coccobacilli
  - e) Incubation period is 3 to 5 months
  
6. *Yersinia pseudotuberculosis*
  - a) Destroyed by refrigeration
  - b) Strict human pathogen
  - c) Causes acute mesenteric lymphadenitis
  - d) Complications include a pulmonary tuberculosis-like illness
  - e) Amoxicillin is the drug of choice

7. Which of the following is not a common cause of acute bacteria sinusitis
- a) *Streptococcus pneumoniae*
  - b) *Haemophilus influenzae*
  - c) *Staphylococcus aureus*
  - d) *Pseudomonas aeruginosa*
  - e) *Streptococcus sanguinis*
8. True about *Corynebacterium diphtheria* except
- a) Contains metachromatic granules in the cytoplasm
  - b) Ability to produce exotoxin is acquired through lysogeny
  - c) Complications of infection are due to bloodstream invasion by the organism
  - d) Catalase positive
  - e) Exotoxin is a heat-stable polypeptide
9. Genus of a non-lactose fermenter bacillus that is rapidly oxidase positive
- a) *Shigella*
  - b) *Salmonella*
  - c) *Neisseria*
  - d) *Pseudomonas*
  - e) *Proteus*
10. The following statements are true for *Proteus* species except
- a) Produces  $H_2S$  on Triple Sugar Iron agar
  - b) Non-motile
  - c) Lactose fermentation is not a property
  - d) A common invader of bed sores
  - e) None of the above
11. Bacteria that are indicators of excreta pollution of water include the following except
- a) *Escherichia coli*
  - b) *Bacillus* species
  - c) *Aeromonas* species
  - d) *Enterobacter* species
  - e) *Citrobacter* species
12. A false statement on urinary tract infections
- a. *E. coli* is a predominant causative agent of bacterial UTIs
  - b. Polymicrobial infections are common in patients with structural abnormalities
  - c. The bladder is fairly resistant to colonization due to the wide array of present commensals
  - d. Coagulase negative staphylococci are a common cause of urinary tract infection among sexually active women
  - e. *E. coli* causes UTI predominantly by the ascending route

13. The following can be considered to be water related infections except

- (a) Trachoma
- (b) Legionnaires disease
- (c) Bacillary dysentery
- (d) Cholera
- (e) Listeriosis

14. Selective medium for *Neisseria gonorrhoeae*

- a) Sheep blood agar
- b) Skirrow's medium
- c) Thayer-Martin agar
- d) Thiosulphate Citrate Bile salts Sucrose medium
- e) Lowenstein-Jensen medium

15. The following features can be seen in the various stages of trachoma disease except

- a) Presence of follicles and inflammation under the eye lid
- b) Formation of scar tissue
- c) Excessive tearing and bleeding
- d) In-turning of the eyelids
- e) Corneal scarring

16. The following specimen is normally sterile

- a. Throat swab
- b. Urethral swab
- c. Suprapubic urine specimen
- d. Stool
- e. Skin scrapings

17. Characteristics of mycoplasmas include

- a. Inability to grow on artificial media
- b. Lack of a cell wall
- c. Susceptibility to penicillin
- d. Requirement of cell culture line for primary isolation
- e. Resistance to all antibacterial antimicrobial agents

18. A case of leprosy with good Cell mediated immunity usually presents as following form of disease:

- a) Lepromatous
- b) Tuberculoid
- c) indeterminate
- d) Borderline
- e) Leproid

19. MDR TB: is defined as resistance to
- More than three anti tubercular drugs
  - Isoniazid and rifampin irrespective of resistance to any other drug
  - Isoniazid, PZA and Rifampicin
  - fluoroquinolones and at least one of the three injectable second-line drugs used to treat TB
  - Resistance to Doxycycline, Isoniazid and Rifampicin
20. Cholera toxin increases the activity of what enzyme in human intestinal cells?
- Adenyl cyclase
  - DNase
  - Coagulase
  - cAMP
  - cGMP
21. What enzyme possessed by *Helicobacter pylori* helps to neutralize stomach acid and whose presence is tested for in biopsy specimens?
- Coagulase
  - Urease
  - Hyaluronidase
  - DNase
  - Catalase
22. Common causes of meningitis in the neonate include:
- Haemophilus influenzae*
  - coliform organisms
  - Group B streptococci
  - Staphylococcus aureus*
  - Streptococcus pneumoniae*
23. Why is the infectious dose of *Vibrio cholerae* so high?
- Because the organism has no virulence factors.
  - Because the organisms must invade all the cells at the mucosa of the duodenum and jejunum.
  - Because most are killed by the acidic environment in the stomach.
  - Because the organism is not spread person-to-person.
  - Because most are killed by lysozyme in saliva.
24. *Candida albicans* causes local infections in all but which of the following sites?
- Endocardium
  - Mouth
  - Pharynx
  - Vagina
  - Lungs

What factor is important in the pathogenesis of *Cryptococcus neoformans*?

- a) Pili
- b) Hyphae
- c) Capsule
- d) Glycoprotein spikes
- e) Lipopolysaccharide

Enzyme lacking in obligate anaerobes is

- a) Collagenase
- b) Oxidase
- c) Hyaluronidase
- d) Phospholipase
- e) Haemolysin

Main clinical manifestation of borreliosis is a result of

- a) Antigenic variation
- b) Effects of endotoxin
- c) Rapid invasion of tissues
- d) Intra-cellular location in phagocytic cells
- e) Invasion of the central nervous system

Lymphatic spread and ulcerative lesions around mouth and nose are characteristics of infection by

- a) *Candida parapsilosis*
- b) *Histoplasma capsulatum duboisii*
- c) *Basidiobolus haptosporus*
- d) *Paracoccidioides brasiliensis*
- e) *Rhinosporidium seeberi*

*Treponema pallidum endemicum*

- a) Is mostly sexually transmitted
- b) Causative agent of a chronic illness which starts in childhood
- c) Is antigenically different from other *Treponema pallidum* subspecies
- d) Requires special liquid medium for laboratory isolation
- e) Is not susceptible to penicillin

False statement on botulinum toxin is

- a) Neutralized by serotype specific antitoxin
- b) Acts through inhibition of protein synthesis
- c) Can be ingested preformed in food
- d) Heat labile
- e) Genes coding for synthesis are acquired from bacteriophages

Sources of systemic fungal infections include the following except

- a) Soil
- b) Dust
- c) Normal flora
- d) Domestic animals
- e) Bird's droppings

Which one does not apply to strict anaerobes

- a) Triple sugar iron agar
- b) Butyric acid
- c) Clindamycin
- d) Mixed infection
- e) Metronidazole

3. Which ONE is not useful in laboratory investigation of aspergillosis

- a) Lactophenol stain
- b) Bird seed agar
- c) Potassium hydroxide
- d) Sabouraud's dextrose medium
- e) Growth at 43 degrees centigrade

34. Scrub typhus is caused by

- a) *Rickettsia prowazekii*
- b) *Rickettsia typhi*
- c) *Rickettsia rickettsia*
- d) *Orientia tsutsugamushi*
- e) *Rickettsia conorii*

35. Bacteria not associated with post-surgical wound infections

- a) *Staphylococcus aureus*
- b) *Proteus mirabilis*
- c) *Escherichia coli*
- d) *Pseudomonas aeruginosa*
- e) *Neisseria gonorrhoeae*

36. Infection not commonly associated with *Escherichia coli*

- a) Gastrointestinal Infections
- b) Urinary tract infections
- c) Pyogenic infections
- d) Neonatal meningitis
- e) Infective endocarditis

37. False of *Norcadia* Species

- a) Gram-positive bacilli
- b) Strict anaerobes
- c) Acid-fast with branching filaments
- d) Commensals in the oral cavity
- e) Transmission is through trauma introduction

38. Actinomycotic mycetoma

- a) Involves the keratinized tissue of the skin
- b) Presents as a tumour with multiple discharging sinuses.
- c) Caused by fungi
- d) Produces black sulfur granules
- e) Treated with fluconazole

39. False of *Coxiella burnetii*

- a) Obligate intracellular bacteria
- b) Causes Q- fever
- c) Human infection may occur after exposure to placenta of an infected mother
- d) Infective endocarditis is a common presentation of a chronic disease
- e) Diagnosis is based on isolation on artificial selective media.

40. Antifungal agent effective in treatment of candidemia

- a) Amphotericin B
- b) Nystatin
- c) Metronidazole
- d) Imidazole
- e) Ketoconazole

41. The flea is an intermediate host for

- a. *Faciolopsis buski*
- b. *Diphylobothrium latum*
- c. *Hymenolepis diminuta*
- d. *Loa loa*
- e. None of the above

42. The pathogenic form of *Toxoplasma gondii* is

- a) Tachyzoite
- b. Egg
- c. Trophozoite
- d. Oocyst
- e. Coracidium

43. Which of the following is a non-motile protozoon?

- a. *Cryptosporidium parvum*
- b. *Leishmania donovani*
- c. *Giardia lamblia*
- d. *Balantidium coli*
- e. *Entamoeba histolytica*

44. Microfilaria of *Loa loa* are best detectable in blood at

- a. 8am to 8pm
- b. 8pm to 8am
- c. 2am to 8am
- d. 8pm to 2am
- e. None of the above

45. Which of the following drugs is conventionally used in the treatment of Toxoplasmosis?

- a. Praziquantel
- b. Suramin
- c. Ivermectin
- d. Pyrimethamine
- e. Metrifonate

46. Which of these parasites is NOT routinely diagnosed by examining blood for microfilariae

- a. *Mansonella perstans*
- b. *Loa loa*
- c. *Onchocerca volvulus*
- d. *Wuchereria bancrofti*
- e. *Brugia malayi*

47. Which of these statements is true regarding *Taenia solium*

- a. It is largely transmitted sexually
- b. Albendazole is the drug of choice for treatment of infection
- c. Only exists in a cysticercus stage
- d. Is transmissible feco-orally
- e. Intermediate host is a herbivore

48. Which of the following is NOT true regarding *Babesia* parasites?

- a. May be transmitted through blood transfusion
- b. Quinine is useful for treating infected individuals
- c. Diagnosis is made by examining Gram stain blood smears
- d. Reproduce both sexually and asexually
- e. The flea is the vector



49. Which of these is useful in diagnosing *Taenia saginata* infection?

- a. Identification of cysticerci in stool
- b. Identification of proglottids in stool
- c. Identification of trophozoites in string test
- d. Identification of cysticerci in tissues
- e. None of the above

50. Which of these parasites have microfilaria?

- a. *Plasmodium ovale*
- b. *Babesia microti*
- c. *Toxoplasma gondii*
- d. *Brugia timori*
- e. *Dracunculus medinensis*

51. Each of the following statements concerning malaria is correct except:

- a) The female anopheles mosquito is the vector ✓
- b) In early infection, sporozoites enter hepatocytes ✓
- c) Release of merozoites from red blood cells cause fever and chills ✓
- d) Principal site of gametocyte formation is the human gastrointestinal tract
- e) May cause anaemia

52. In malaria, what stage is transmitted from mosquito to humans

- a) Sporozoite
- b) Gametocyte
- c) Merozoite
- d) Hypnozoite
- e) None of the above

53. Cerebral fever is a complication of malaria usually caused by;

- a) *P. falciparum*
- b) *P. malariae*
- c) *P. ovale*
- d) *P. vivax*
- e) All of the above

54. Which of the following statements regarding *Plasmodium falciparum* is true?

- a) Causes more severe disease in pregnancy
- b) Is associated with relapses after initial treatment because of liver hypnozoites
- c) Can be transmitted by female Aedes mosquitoes
- d) Can be treated with primaquine
- e) None of the above

55. Which of these statements regarding *Plasmodium vivax* is false

- a) May cause cerebral malaria
- b) May relapse after treatment without re-infection
- c) Is transmitted by *Anopheles* mosquito
- d) Treatment requires the use of primaquine
- e) None of the above

56. Which of the following microfilariae is diagnosed by skin snip?

- a) *Wuchereria bancrofti*
- b) *Onchocerca volvulus*
- c) *Loa loa*
- d) *Brugia malayi*
- e) None of the above

57. Which of these parasites is associated with blindness

- a) *Loa loa*
- b) Trypanosome *brucei gambiense*
- c) *Onchocerca volvulus*
- d) *Mansonella perstans*
- e) None of the above

58. Which of these tissue nematodes are transmitted by mosquitoes

- a) *Wuchereria bancrofti*
- b) *Loa loa*
- c) *Onchocerca volvulus*
- d) *Mansonella ozzardi*
- e) *Dracunculus medinensis*

59. Which of these parasites is associated with hanging groin

- a) *Wuchereria bancrofti*
- b) *Brugia malayi*
- c) *Onchocerca volvulus*
- d) *Mansonella mansonii*
- e) *Mansonella streptocerca*

60. Which of these parasites has sheathed microfilariae with nuclei extending to the tip

- a) *Wuchereria bancrofti*
- b) *Brugia malayi*
- c) *Mansonella ozzardi*
- d) *Onchocerca volvulus*
- e) *Loa loa*

61. All the following features are associated with African Trypanosomiasis except
- a) Hepatosplenomegaly
  - b) Chancre
  - c) Kerandals sign
  - d) Winter button sign
  - e) Arch 5 test
62. Which of the following drugs are used in the treatment of severe and complicated malaria?
- a) Primaquine
  - b) Tetracycline
  - c) Chloroquine
  - d) Quinine
  - e) Pyrimethamine
63. Hydrocephalus is a clinical feature observed in patients infected with which of the following parasite:
- a) *Pneumocystis carinii*
  - b) *Entamoeba histolytica*
  - c) *Trichinella spiralis*
  - d) *Toxoplasma gondii*
  - e) *Onchocerca volvulus*
64. Fleas transmit all of the following parasitic infections except
- a) *Dipylidium caninum*
  - b) *Rickettsia prowazeki*
  - c) *Pasteurella pestis*
  - d) *Rickettsia mooseri*
  - e) *Hymenolepis diminuta*
65. The following are larval stages of Cestodes except
- a) Proceroid
  - b) Coracidium
  - c) Miracidium
  - d) Onchosphere
  - e) Cysticercoids
66. Which of the following chemical compounds are effective in the control of Schistosoma haematobium
- a) Permethrin
  - b) DDT
  - c) Malathion
  - d) Aldrin
  - e) Copper sulphate concentration

which of the following parasites is associated with central nervous system complications:

- a) *Plasmodium malariae*
- b) *Leishmania donovani*
- c) *Ascaris lumbricoides*
- d) *Taenia saginata*
- e) *Taenia Solium*

68. Bone marrow examination is helpful in which of the following parasitic infections

- a) *Trichinella spiralis*
- b) *Echinococcus granulosus*
- c) *Trichuris trichuria*
- d) *Trichomonas hominis*
- e) *Taenia saginata*

69. Which of the following parasitic infections may cause severe travellers' diarrhoea?

- a) *Entamoeba coli*
- b) *Giardia lamblia*
- c) *Trichomonas hominis*
- d) *Chilomastix mesneli*
- e) *Balantidium coli*

70. Autoinfection usually occurs in infection with

- a) *Taenia saginata*
- b) *Balantidium coli*
- c) *Taenia solium*
- d) *Necator americanus*
- e) *Ascaris lumbricoides*

71. Which of the following parasites can be associated with neurological disorders?

- a) *Entamoeba histolytica*
- b) *Isospora belli*
- c) *Blastocystis hominis*
- d) *Entamoeba coli*
- e) *Giardia lamblia*

72. Which of the following is a non-pathogenic intestinal commensal?

- a) *Entamoeba coli*
- b) *Isospora belli*
- c) *Strongyloides stercoralis*
- d) *Trichinella spiralis*
- e) *Sarcocystis suihominis*

73. The human-infective stage of *Wuchereria bancrofti* is?

- a) Egg stage
- b) Larval stage one (L1)
- c) Larval stage two (L2)
- d) Larval stage three (L3)
- e) None of the above

74. Which of the following parasites is only found in Africa?

- a) *Schistosoma intercalatum*
- b) *Schistosoma mansoni*
- c) *Schistosoma mekongi*
- d) *Schistosoma japonicum*
- e) *Schistosoma haematobium*

75. Occult filariasis is mainly caused by?

- a) Eggs
- b) Microfilariae
- c) Adult worms
- d) Larval stage three (L3)
- e) None of the above

76. Which of the following stages of *Leishmania* spp. is found in the human host?

- a) Oocyst
- b) Cyst
- c) Egg
- d) Amastigote
- e) Trypomastigote

77. Which of the following parasites is associated with muscular dystrophy?

- a) *Necator americanus*
- b) *Blastocystis hominis*
- c) *Strongyloides stercoralis*
- d) *Entamoeba histolytica*
- e) *Trichinella spiralis*

78. Which of the following is the human-infective stage of *Isospora belli*?

- a) Egg
- b) Oocyst
- c) Cyst
- d) Cercaria
- e) Larval stage three (L3)

79. *Entamoeba histolytica* can be cultured in:

- f. Macconkey agar
- g. Sebaroud's medium
- h. Diamonds medium
- i. NNN medium
- j. None of the above

80. Mode of infection of *Dracunculus medinensis* is:

- k. Ingestion
- l. Inhalation
- m. Skin penetration
- n. Inoculation by Cyclops
- o. Inoculation by Chrysops

81. One of the following classes of antivirals is effective for Hepatitis C:

- a. Protease inhibitors
- b. Integrase Inhibitors
- c. Uncoating inhibitors
- d. DNA polymerase inhibitors
- e. Viral release inhibitors

82. The main host for influenza B viruses is:

- a. Man
- a. Horse
- b. Ducks
- c. Pigs
- d. All the above

83. One of the following statements is true about influenza viruses:

- a. They have a DNA genome
- b. They replicate in the Nucleus
- c. They have a non-segmented genome
- d. Rarely undergo mutations
- e. They are non-enveloped

84. One of the following statements on emerging infections is FALSE:

- a. They can occur anywhere in the globe
- b. Many are zoonotic infections
- c. Vaccination is the main strategy for prevention
- d. They are difficult to diagnose because they present with non-specific signs
- e. May remain undetected for a period of time

5. One of the following maybe treated with a specific anti-viral therapy EXCEPT?

- a. HIV
- b. Hepatitis B
- c. Hepatitis C
- d. Human Herpes virus 4
- e. Influenza

5. One of the following statements about abnormal prion proteins is true:

- a. They induce a strong immune response
- b. They are destroyed by gastric acid
- c. They cause granulomas in the brain of affected persons
- d. Can be controlled by cooking meat well
- e. The commonest form is sporadic

One of the following statements about Chikungunya is true:

- a. Causes hemorrhagic symptoms in over 50% of infected persons
- b. Has not been reported outside Africa and Asia
- c. Is transmitted by the soft tick *Ornithodoros moubata*
- d. Is an alphavirus in the Togaviridae family
- e. Has a licensed prophylactic vaccine

There are licensed vaccines available against the following viral infections except:

- a. Polio
- b. Hepatitis B
- c. Hepatitis C
- d. Herpes zoster
- e. Influenza

One of the following is a broad-spectrum RNA polymerase inhibitor:

- a. Acyclovir
- b. Efavirenz
- c. Favipravir
- d. Oseltamivir
- e. Lopinavir

Maternal prophylaxis with antiviral agents is useful in preventing vertical transmiss

- a. Human papillomavirus
- b. Hepatitis B
- c. Measles
- d. Zika
- e. Human herpes virus 8

pt. Poxvirus.

- a. Is a small RNA virus
- b. Is enveloped
- c. Replicates in the nucleus.
- d. Causes paralysis in over 50% of infected persons
- e. Destroys anterior horn cells by producing cytolytic toxin

22. This virus is associated with vesicular rash

- a. Measles virus
- b. Rubella virus
- c. Parvovirus B19
- d. HSV-2
- e. Calicivirus

23. This virus is associated with maculopapular rash

- a. Measles virus
- b. HSV-1
- c. HSV-2
- d. Coxsackievirus
- e. Varicella zoster virus

24. The virus that causes smallpox is transmitted

- a. Sexually
- b. Fecal-oral
- c. Via the aerosol
- d. Vertically
- e. Insect bite

25. Koplik spot is a feature of this virus

- a. Parvovirus B19
- b. Varicella-zoster virus
- c. Poxvirus
- d. Dengue virus
- e. Measles virus

26. Subacute sclerosing panencephalitis (SSPE) is a rare complication associated with this virus

- a. Poliovirus
- b. HSV-1
- c. Calicivirus
- d. Measles virus
- e. Chikungunya virus



MAASAI MARA SAFARI  
 Happening now  
 Oct 13, 2018 at 08:56  
 Green Bagel Salads



Registration No. 1031/34058/2016

97. Congenital rubella syndrome (CRS) can occur in women having primary infection with rubella virus during this period of pregnancy

- a. First trimester
- b. Second trimester
- c. Third trimester
- d. Entire pregnancy period (9-month period)
- e. Only occurs in immunodeficient women

98. Hand, foot, and mouth disease is caused by this virus *GROUP 1 ssRNA*

- a. Poliovirus
- b. Calicivirus
- c. Coxsackie virus type A
- d. A dsDNA virus
- e. A negative sense ssRNA virus

99. Parainfluenza viruses (associated with common colds) share the same virus family as this virus *Paramyxo*

- a. Influenza virus
- b. Coronavirus
- c. Rhinovirus
- d. Sars virus

e. Respiratory Syncytial virus (RSV)

100. The oral polio virus vaccine (OPV)

- a. Is a live-attenuated virus vaccine
- b. Induces both local IgA and systemic IgG
- c. Is easily administered
- d. Can be used in herd-immunity

e. All of the above