

## Microbiology

1) A granuloma is a complication of over-reaction of? غير مطلوب

Select one:

- a. TH1 cells
- b. Antibody production
- c. B cells.
- d. TH2 cells.
- e. Eosinophils.

2) After using a syringe to give intravenous drug, one of the following is TRUE? غير مطلوب

Select one:

- a. Give it to the nurse to recap the needle
- b. Leave the syringe on the patient's bed wait an hour then recap the needle
- c. Swap the needle with alcohol and iodine then recap the needle.
- d. Never recap the needle and discard the syringe in the yellow sharp pin.
- e. Throw the syringe in the black plastic bag.

3) Mechanisms of antibacterial resistance include all of the followings EXCEPT? غير مطلوب

Select one:

- a. Decreased antibiotics uptake mediated by porins changes
- b. Increased pumping out the antibiotic by efflux pumps
- c. Production of enzymes called beta lactamases that destroy the beta lactam ring
- d. Target bypass such as the production of PBP2 in MRSA
- e. Mitochondrial cumulative point mutations

4) Which of the following processes the bacterial cell is forced in the lab to take an external segment of DNA? غير مطلوب

Select one

- a. Conjugation.
- b. Cloning
- c. Transduction
- d. Bacteriophage infection.
- e. Natural mutation

5) Biotype is an infra-subspecific designation according to? غير مطلوب

Select one:

- a. Pathogenic properties for certain hosts.
- b. Ability to be lysed by certain bacteriophages.
- C. Special biochemical and physiological properties.
- d. Certain antigenic properties
- e. Special morphological features

6) Which of the followings is an example on transmission by droplet nuclei (airborne)? غير مطلوب

Select one:

- a. E. coli.
- b. Tuberculosis.
- c. hepatitis C.
- d. Cholera
- e. Hepatitis A

7) One of the following antibiotics causes a reversible stop of bacterial growth (bacteriostatic)? غير مطلوب

Select one:

- a. Vancomycin.
- b. Chloramphenicol.
- C. Aminoglycosides.
- d. Ciprofloxacin
- e. Rifampicin

8) A blood in stool can be found in which of the following infections? غير مطلوب

Select one:

- a. The infection of certain strains of E coli.
- b. The infection of certain strains of Vibrio cholera.
- c. The infection of certain strains of Corynebacterium diphtheriae.
- d. The infection of certain strains of Campylobacter
- e. The infection of certain strains of Pseudomonads.

9) Which of the following tests is a serological test used in identification of bacteria?

Select one:

- a. Restriction fragment length polymorphism.
- b. Plasmid fingerprinting.

- c. Polymerase chain reaction.
- d. Enzyme linked immunosorbent assay.\*
- e. Nucleic acid sequencing analysis

10) Viruses whose genomes have a messenger polarity are? غير مطلوب

Select one

- a. Adenoviruses
- b. Papovaviruses
- C. Paramyxoviruses.
- d. Herpesviruses
- e. Picornaviruses,

12) Sterilization using autoclave can be achieved? غير مطلوب

Select one:

- a. At 134°C For 3 minutes.
- b. At 63°C for 30 minutes
- C. At 72°C for 15 seconds.
- d. At 100°C for 15 minutes
- e. At 121°C for 5 minutes.

13) Regarding the enriched media, all are false EXCEPT? غير مطلوب

Select one:

- a. It contains agents that inhibit the growth of all agents except that being sought b. It is used when specimen cannot be cultured soon after collection
- c. It is used for storing the bacteria for a long period of time.
- d. It is used for culture of fastidious organisms.
- e. MacConkey agar considered an example for enriched media.

14) Disinfection of day care center play tables with 70% ethanol is UNLIKELY to affect the viability of?  
غير مطلوب

Select one

- a. Paramyxoviruses
- b. Influenza virus
- C. Herpesviruses.
- d. Coronaviruses.
- e. Rotavirus.

15) Which of the following is the most important structure related to microbial movement? غير مطلوب

Select one:

- a. Spores.
- b. Pilus.
- C. Capsule.
- d. Fimbriae.
- e. Flagella.

16) Infection control measures include all of the followings EXCEPT? غير مطلوب

Select one:

- a. Bare above elbow.
- b. Share thermometers between patients
- C. No coats.
- d. Cover open wounds with occlusive adhesive
- e. Hand washing

17) Slime layer is the part of? غير مطلوب

Select one :

- a. Glycocalyx
- b Endoplasmic reticulum
- C. Lysosomes.
- d. Golgi
- e Nucleus.

18) Integration of viral genetic material into the host DNA is seen in?

Select one

- a. Reoviruses.
- b. Rhabdoviruses
- C. Hepatitis B virus.
- d. Orthomyxoviruses.\*
- e. Paramyxoviruses.

19) Which of the following are made up of Prokaryotic cells? غير مطلوب

Select one.

- a. Bacteria
- b. Fungi
- C. Protozoa
- d. Viruses.

e. Parasite

20) One is WRONG regarding antibiotics? غير مطلوب

Select one:

- a. Minimum inhibitory concentration is a term used for bacteriostatic antibiotics
- b. Synergism is when the effects of a combination of antibiotics is greater than the sum of the effects of the individual antibiotics
- c. A bactericidal antibiotic is preferred in treating infection in an immunocompromised patient
- d. On bacterial growth curve Bacterial control growth and bacterial growth with efficient antibiotic have the same curts
- e. Always ask about antibiotic hypersensitivity (allergy) before prescnbing it to the patient

21) Nosocomial infection (NCI), one is WRONG? غير مطلوب

Select one

- a. Increases mortality and morbidity rates
- b. Performance of an invasive procedure for a patient increases the risk of NCI
- c. The patient can transmit such infection to doctors and nurses.
- d. Endogenous NCI is s caused by patients own microorganisms
- e. Hand washing is not an important measure to decrease NCI

22) Removing specific infection hazards in milk industry is best obtained by? غير مطلوب

Select one

- a. Autoclaving
- b. UV light
- c. Dry heat at 100
- d. Flaming.
- e. Pasteurization

23) Clostridium perfringens bacterium is? غير مطلوب

Select one:

- a. Spore-forming Gram positive bacillus
- b. Spore-forming Gram negative bacillus.
- c. Spore-forming Gram positive cocci
- d. Non-spore forming Gram positive bacillus

e. Spore-forming intracellular bacteria

24) All the following DNA viruses replicate in the nucleus EXCEPT?

Select one:

- a. Herpesviruses
- b. Parvoviruses.
- c. Poxviruses.\*
- d. Hepadnaviruses.
- e Adenoviruses.

25) The cell wall of gram-positive bacteria are mainly composed of? غير مطلوب

Select one

- a. Capsular protein
- b. Lippolysacharide
- c. Peptidoglycan
- d. Phospholipid
- e. lipoprotein.

26) Which of the following structure can help in plasmid transfer from one bacterium to another غير مطلوب

Select one:

- a. Spores.
- b. Pilus
- c. Capsule.
- d. Fimbriae
- e. Flagella

27) Who demonstrated that open tubes of broth remained free of bacteria when air was free of dust? غير مطلوب

Select one

- a Abbc Spallanzani
- b. John Tyndall
- c. Francisco Redi
- d. Pasteur
- e. Alexander Fleming

28) Which of the following bacteria can cause infection through consumption of contaminated mik? غير مطلوب

Select one

- a. Legionella pneumophila
- b. Bordetella pertussis.
- c. Haemophilus influenza
- d. Brucella,
- e. Yersinia enterocolitica

29 ) Which of the followings has terminal spores? غير مطلوب

Select one:

- a. Corynebacterium diphtheriae
- b. Haemophilus influenzae.
- C. Yersinia enterocolitica.
- d. Neisseria meningitides
- e. Clostridium tetani.

30) Kuru is a fatal disease that is thought to be caused by? غير مطلوب

Select one

- a Slow viruses.
- b. Defective virus.
- c. Pseudovirion
- d. Priors
- e Viroid

31) Which of the followings is an example on transmission by respiratory droplet? غير مطلوب

Select one

- a. E. coli.
- b. hepatitis C.
- c. Hepatitis A.
- d. Cholera
- e. Pertusis

32) Which of the following structures is never present in a Eukaryotic cell? غير مطلوب

Select one:

- a. Spores.
- b. Mitochondria.
- C. Ribosome.
- d. Membrane-bound nucleus.

e. Cell membrane

33) Which of the followings has central spore? غير مطلوب

Select one

- a. Bacillus anthracis
- b. Clostridium tetani
- c. Staphylococci aureus
- d. H. pylori
- e. Legionella pneumophila

34) Sterilizing an endoscope in gastrointestinal units is best achieved by? غير مطلوب

Select one:

- a. 76 % alcohol.
- b. Tyndallisation
- c. Inspissations
- d. Ethylene oxide
- e. 99% alcohol

35) The bacterial cells are at their metabolic peak during.....phase? غير مطلوب

Select one

- a. Lag.
- b. Log
- C. Stationary
- d Decline
- e Eclipse

36) Modification of viral receptors on a eukaryotic host cell might affect which step in viral replication cycle

Select one:

- a. It would facilitate the process of viral endocytosis.
- b. It would result in the degeneration of the viral capsid.
- c. It would enhance the process of viral apoptosis
- d. It would prevent the virus from attaching to the host cell.\*
- e. It would prevent the viral assembly

37) One of the followings is Gram negative and intracellular bacteria? غير مطلوب



Select one:

- a. Chlamydia.
- b. Clostridium difficile.
- c. Legionella pneumophila
- d. Bordetella pertussis
- e. Proteus.

38) Which of the followings is INCORRECT regarding Blood and tissue nematodes?

Select one:

- a. The infective stage of *W. bancrofti* is the L3 larva.
- b. The Intermediate hosts of *W. bancrofti* is the *Anopheles* mosquitoes.
- c. The eye worm is called *Loa Loa*.
- d. The intermediate host of the eye worm is the horsefly
- e. The adult worm of *Trichinella Spiralis* can be isolated from the striated muscle\*

39) Induction of passive-active immunity is useful in the prevention of which one of the following viral diseases?

Select one

- a. Hepatitis A
- b. Rabies.
- c. Influenza.
- d. Mumps
- e. Measles\*

40) Which of the following vectors is INCORRECT?

Select one:

- a. *Culex*: *W. bancrofti*.
- b. black fly. *Onchocerca volvulus*
- c. *Chrysops*: *Loa loa*.
- d. Horsefly: *Onchocerca volvulus*.\*
- e. *Culex*: *Brugia malayi*.

41) A granuloma is a complication of over-reaction of غير مطلوب

Select one

- a. TH1 cells
- b. Antibody production
- c. B cells
- d. TH2 cells
- e. Eosinophis

42) Which of the followings is INCORRECT regarding the diagnosis of parasitic infection?

Select one

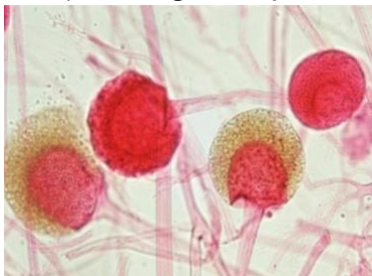
- a. The amoeba from the stored samples in the refrigerator can be seen by the wet mount preparation
- b. Liquid and soft stool examined within 15 min.
- c. Direct Smears of stool is used to assess the worm burden of a patient.
- d. Sputum is dissolved before examination
- e. Venous blood collected in EDTA anticoagulant is used to study blood parasites.

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\*\*44) This figure represents? غير مطلوب



Select one

- a. Arthrospores
- b. Chlamydospores.
- c. Basidiospores.
- d. Blastospores.
- e. Sporangiospores.

45) Habitat of Fasciolopsis buski is?

Select one:

- a. The liver.
- b. The lung
- c. Large intestine.
- d. Small intestine\*
- e. Muscles.

46) The role of antibody against Plasmodium is mainly to do all except? غير مطلوب

Select one:

- a. Act a direct damage by complement mediated.
- b. Do ADCC.
- c. Neutralization
- d. Block attachment to host cells.
- e enhance Phagocytosis

47) A cofactor in Burkitt's lymphoma is?

Select one

- a. Hepatitis C virus infection
- b. Hepatitis B virus infection
- c. Human papillomavirus
- d. Human T-Lymphotropic virus 1 infection
- e. Epstein-Barr virus infection\*

48) The Main site of action of Formiversin is? غير مطلوب

Select one

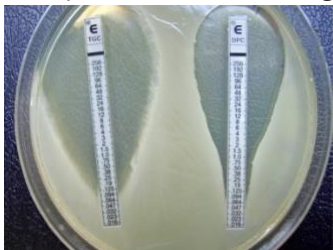
- a. Attachment and penetration of virion
- b. Viral MRNA
- c. Viral protein synthesis
- d. Viral genome DNA synthesis
- e. Assembly and release of progeny virus

49) Which of the following features differentiates fungal cells from human cells?

Select one:

- a. 80S ribosomes.
- b. Presence of an endoplasmic reticulum,
- C. Ergosterol as the major membrane sterol\*
- d. Enzymes that allow them to use carbon dioxide as their sole carbon source,
- e. Presence of chloroplasts

\*\*50) All are correct regarding this test EXCEPT?



Select one:

- a Called E-test
- b. Is a substitution for MIC

- c. Plastic strips with a gradient of one antibiotic
- d. Storage at room temperature\*
- e. Short shelf life expensive.

\*\*51)The following life stage is belonging to which trematodes?



Select one:

- a Fasciola spp.
- b Heterophyes heterophyes.
- C. Dendriticum Dicrocellum
- d. Schistosoma spp\*
- e. Paragonimus westermani

52) Adhesive tape is used for the diagnosis of?

Select one:

- a. Ancylostoma duodenale.
- b. Trichuris trichiura.
- C. Entrobium vermicularis\*
- d. Ascaris lumbricoides.
- e. Capilaria philippinensis.

53) Seeing multinucleated giant cells in a cell culture can be used to make a presumptive diagnosis of infection by which one of the following viruses? غير مطلوب

Select one

- a. Adenovirus
- b. Herpes simplex virus
- C. Human papilloma virus
- d. Parvovirus B19
- e. Rubella virus

54) Each of the following statements concerning Diphyllbothrium latum is correct EXCEPT?

Select one

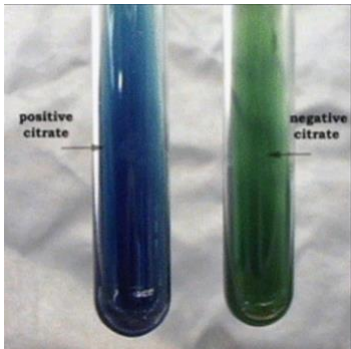
- a. It is transmitted by undercooked fish.
- b. It has operculated eggs.
- c. it causes a megaloblastic anemia due to vitamin B12 deficiency
- d. Its Gravid uterus forms a rosette
- e. It is a tapeworm that has a scolex with four suckers and a circle of hooks\*

55) Which of the following tapeworm is very short and called a dwarf tapeworm?

Select one:

- a. Diphylobothrium latum.
- b. Echinococcus granulosus.
- C. Taenia saginata.
- d. Hymenolepis nana.\*
- e. Taenia solium.

56) This test is..... and the pH indicator is.....?



Select one:

- a Citrate utilization test malachite green
- b. Urease test, malachite green
- C. Phenylalanine deaminase test bromothymol blue
- d. Citrate utilization test bromothymol blue\*
- e Indole test, Kovac's reagent

57) Entamoeba coli, one is WRONG? غير مطلوب

Select one:

- a. Usually discovered incidentally
- b. its cyst may have more nuclei compared to E. histolytica.
- C. Its trophozoites may appear with engulfed bacteria.
- d. its trophozoite has a granular endoplasm
- e. Has a spherical cyst with 1-8 nuclei.

58) The exchange of homologous segments of RNA between two different influenza type A virus is called? غير مطلوب

Select one:

- a. Complementation.
- b. Genetic reassortment.
- c. Phenotypic masking
- d. Phenotypic mixing.
- e. Recombination

59) The main immune response against Protozoa is mediated by? غير مطلوب

Select one

- a. TH1 cells.
- b. Antibody production
- c. TH17 cells
- d. TH2 cells
- e. Eosinophis

60) Man acting as a host for *Toxocara canis* is considered as? غير مطلوب

Select one:

- a. Definitive host.
- b. Reservoir host.
- C. Accidental host.
- d. Intermediate host
- e. Only in immunocompromised host.

61) Which of the following most accurately describes a latent infection caused by a virus?

Select one

- a. The virus replicates in the host cell that is usually killed by the release of the progeny viruses
- b. The virus genome has integrated into the host cell transforming a into tumour cells
- c. The viral genome is inside the cell but the genome is not replicating or the virus is not going harm to me\*
- d. The virus replicates in the host cell and slowly releases virus progeny with very few of the infected cells
- e. The virus infects the host cells produces a virus progeny through the budding process

62) In the laboratory practical for hand washing, which was true? غير مطلوب

Select one:

- a. Hand washing with soap and water was the best in reducing bacteria.
- b. Alcohol rub was the best in reducing bacteria
- c. No alcohol and no hand washing was the best in reducing bacteria.
- d. Alcohol rub and hand washing with soap and water had the same effect
- e. Alcohol rub has same effect as not washing the hands or rubbing it with alcohol

63) What are the most common laboratory culture medium for fungal growth?

Select one:

- a Sabouraud dextrose agar\*
- b. Mannitol salt agar
- C. Thayer Martin medium
- d. Cornmeal agar
- e XLD agar

64) Penicillin are bactericidal and act on? غير مطلوب

Select one:

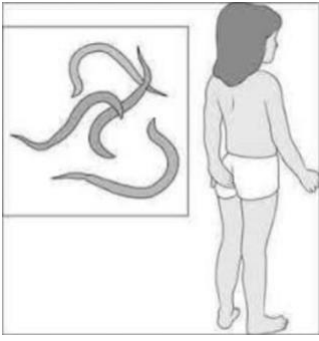
- a. Cell wall
- b. DNA
- C. 30s ribosome.
- d. 50s ribosome
- e. messenger RNA

65) Which one of the following sequences is appropriate for testing a patient for antibody against the AIDS virus with the ELISA procedure as the assay is carried out in a plastic plate with an incubation and a wash step after each addition except the final one?

Select one

- a. Patient's serum/enzyme substrate/HIV antigen/enzyme-labeled antibody against HIV
- b Enzyme-labeled antibody against human gamma globulin patient's serum HIV antigen/enzyme substrate
- c. HIV antigen/patient's serum/enzyme labeled antibody against human gamma globulin/enzyme substrate\*
- d. Enzyme-labeled antibody against HIV/HIV antigen/patient's serum enzyme substrate
- e. Enzyme substrate/Patient's serum/HIV antigen/enzyme-labeled antibody against HIV

\*\* 66) This mode of infection is related to?



Select one:

- a. *Ascaris lumbricoides*.
- b. *Ancylostoma duodenale*.
- c. *Necator americanus*.
- d. *Enterobius vermicularis*\*
- e. *Trichuris trichiur*.

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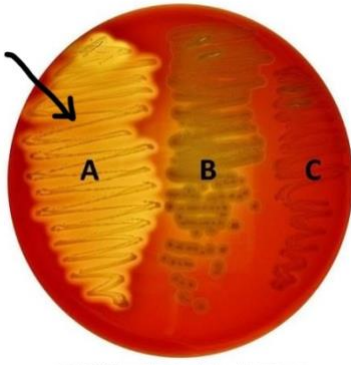
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- b. Enzyme-labeled antibody against human gamma globulin patient's serum HIV antigen/enzyme substrate
- c. HIV antigen/patient's serum/enzyme-labeled antibody against human gamma globulin/enzyme substrate\*
- d. Enzyme-labeled antibody against HIV/HIV antigen/patient serum enzyme substrate
- e. Enzyme substrate Patient's serum HIV antigen/enzyme-labeled antibody against HIV.



69) plate showing hemolytic colonies, the arrow pointed at?



- a. Alpha hemolytic growth in which complete hemolysis occurs
- b. Beta hemolytic growth in which hemoglobin converted into methemoglobin
- C. Gamma hemolytic growth in which there is no change in the medium
- d. Alpha hemolytic growth in which hemoglobin converted into meihemoglobin
- e. Beta hemolytic growth in which complete hemolysis occurs\*

70) Immature larval form of the parasite occurs in the

- a. Definitive host
- b. Reservoir host
- C. Accidental host
- d. Intermediate host\*
- e. Only in immunocompromised host

71) A parasite that passes through the human intestine without causing any disease and is detected in the stool is called

- a. Facultative
- b. Opportunistic
- C. Obligatory
- d. Spurious\*
- e. Ectoparasite

72) A common place of amoebic flask shaped ulcer is?

- a Duodenum
- b Jejunum
- C. slum
- D. Vacuum
- E. Pylorus

73) Negri bodies are ..... and associated with.....

- a. Intra-nuclear basophilic inclusion bodies Cytomegalovirus infections.
- b. Intra-cytoplasmic basophilic inclusion bodies. Herpes simplex virus infections\*
- C. Intra-cytoplasmic eosinophilic inclusion bodies, Rabies virus infections
- d. Intra-nuclear eosinophilic inclusion bodies. Cytomegalovirus infections
- e Intra-cytoplasmic basophilic inclusion bodies Rabies mus infections

74) Which of the followings act by inhibition of folate synthess? غير مطلوب

- a Erythromycin
- b Co-Trimoxazole
- C Ritampin
- a Cephalosporins
- E. Polymyxin

75) Cleavage of antibody is an example of escape of? غير مطلوب

- a. Schistosoma.

b. Plasmodium.

C. Malaria.

d. Trypanosome.

e Ascaris

76) Influenza virus infection is?

a Inapparent infection

b. Acute infection\*

C. Persistent infection.

d. Latent infection

e. Slow infection.

77) Your patient is a 15-year-old girl with a 2-week history of headache and vomiting and a 3-day history of confusion and difficult speech MRI of the brain reveals multiple lesions bilaterally. The following day, she has a seizure and dies. On autopsy, the brain lesions consist of a cyst-like sac containing a larva. Of the following, which one is the most likely cause?

a. Diphylobothrium latum.

b Echinococcus granulosus

C Taenia saginata.

d. Taenia solium\*

e EchinocoCcus multilocularis

78) This figure represents..... ?



- a Taenia solium Scolex.\*
- b. Taenia saginata Scolex
- c Scolex of Echinococcus granulosus.
- d. Diphylobothrium latum Scolex
- e Mature proglottid of Dipylidium canine

79) following structure of Fasciola which indicated by arrow A?



- a. Testes
- b Oral sucker
- C. ventral sucker\*
- d Branched ovaries
- E. uterus

80) Virus will contain?

- a Cell membrane
- b. Cell wall

C DNA

d DNA or RNA\*

e Ribosome

81) A..... is the larval stage of a fluke that is covered with cilia and swims about seeking out a snail to serve an intermediate host

a. Coracidium

b. Miracidium\*

C. Cercaria.

d. Metacercaria

e Redia

82) Characteristics of a bacterial capsule include? غير مطلوب

a All bacteria have one

b. It is composed of peptidoglycan

C. It is an important mechanism for protecting a bacterium against ingestion by PMNs

d. It is what causes the gram stain reaction

e Food storage

83) Which of the following nematodes is an intestinal with a tissue stage?

a. Necator americanus\*

b. Loa loa

C. Onchocerca volvulus

D. dracunculus medirensis

E. Enterobius vermicularis

84) This image is related to?



a Strongyloides stercoralis

b Loa loa

c Onchocerca volvulus

d Dracunculus medirensis

e Necator americanus

85) The following EGG is belonging to which trematodes?



a Fasciola spp\*.

b Heterophyes heterophyes.

c Dendriticum Dicrocoelium

d. Schistosoma sp

E. Paragonimus westermani

86) This sneeze can transmit all of the followings except? غير مطلوب



- a Diphtheria
- b. Pertussis.
- C. Meningococcal meningitis
- d. Hepatitis C
- e. Coronavirus,

87) Which of the following is INCORRECT regarding the sputum examination?

- a. Sputum sample is added to an equal volume of HCL to dissolve the mucus\*
- b. The sputum sample is centrifuged at 200xg for 5 minutes
- C. Entamoeba histolytica can cause pathology in the lungs
- d. The specimen can be preserved in 10% formalin
- e Sputum sample is added to an equal volume of NaOH to dissolve the mucus

88) Water plant is the intermediate host for the?

- a Schistosoma mansoni

- b. *Schistosoma japonicum*
- C. *Clonorchis sinensis*
- d. *Paragonimus westermani*.
- e *Fasciolopsis buski*\*

89) Pinocytosis is involved in which step of viral replication?

- a. Attachment
- b. Uncoating.
- C. Penetration.\*
- d. Nucleic acid and protein synthesis.
- e. Release

90) Which of the followings is INCORRECT regarding this egg?



- a. The egg of *Trichuris trichiura*
- b. The posterior end of the adult female is straight and bunt
- C. Posterior end of the adult male is curved and provided with 2 spicules
- d. The egg is only found in the intestine\*
- e. The egg is bile stained



91) The 9th step in hand washing is? غير مطلوب

- a. Rub each wrist with opposite hand
- b. Rub hands palm to palm
- C. Rub palm to palm with fingers interlaced
- d. Rub tips of fingers in opposite palm in a circular motion
- e. Use elbow to turn off tap

92) Nematodes have the following characteristics EXCEPT?

- a. The Microfilariae of W bancroft can be isolated at night from lymphatic vess
- b. It requires two hosts to complete its life cycle
- C. Causes lymphatic filariasis and elephantiasis
- d. human is the definitive host
- e. Found usually in lymphatic of the upper limb\*

93) Regarding Echinococcus granulosus, which one of the following is most accurate? غير مطلوب

- a. The drug of choice for E granulosus infection is metronidazole
- b. Dogs are a required part of the life cycle of the causative organism
- C. Echinococcus granulosus is one of the longest tapeworms
- d. Echinococcus granulosus larvae typically migrate to skeletal muscle where they cause an abscess
- e. The main mode of transmission to humans is ingestion of eggs in food or water contaminated with hu

94) Which of the following combinations is INCORRECT?

- a Trichuris trichiura Whipworm

b Eggs in the folds of the perianal region Pin Worm

C Barrel-shaped with mucus plug at each pole. The pinworm egg\*

E vermicularis Autoinfección

e Necatoramecanus the infective stage Is he from arva

95) Cary-Blair medium is a(n)? غير مطلوب

a Enriched medium

b. Differential medium

c. Selective medium

d. Inhibitory medium

e. Transport medium

96) The treatment of choice for asymptomatic E. histolytica is ?

a. Amoxicillin

b. Promomycin\*

c. Ceftriaxone

d Metronidazole

E. Coamoxiclav

97) Regarding Echinococcus granulosus, which one of the following is most accurate? غير مطلوب

a. The drug of choice for E granulosus mtection is metronidazole

b. Dogs are a required part of the life cycle of the causative organism

C. *Echinococcus granulosus* is one of the longest tapeworms

d. *Echinococcus granulosus* larvae typically migrate to skeletal muscle where they cause an abscess

e. The main mode of transmission to humans is ingestion of eggs in food or water contaminated with human feces

98) Which of the following combinations is INCORRECT

a. *Trichuris trichiura* - whaledent

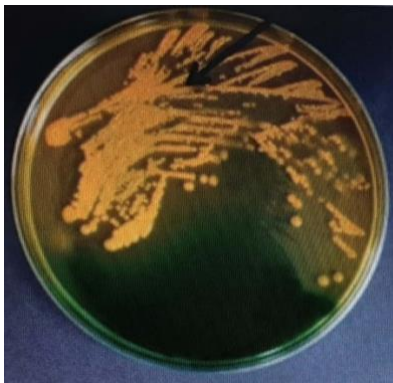
B. Eggs in the folds of the perianal region - pin worm

C. Barrel shaped with a plug at each pole. - The pin worm egg\*

D. *E. Vermicularis* - autoinfection

E. *Necator americanus* - the infected stage is the fiterform larva

99) What is this growth that the arrow pointed at?



a. *E. coli* on MacConkey agar

b. *Vibrio parahaemolyticus* on TCBS agar

C. *Salmonella* on SS agar

D. *Vibrio cholera* on TBS agar\*

E. *Streptococcus pneumoniae* on Chocolate agar

100) Which of the following lead to anaphylactic shock?

- a Leaking Hydatid cyst
- b. Migrating larvae of ascarig
- C. Cross reaction with malaria antigens
- d Deposition of immune complexes\*
- e. Cell mediated immunity against schistosoma eggs

101) Name this method?



- a Agar dilution method\*
- b Kirby-Bauer method
- c. Epsilometer test (E-test)
- d. MIC
- e MBC

102) The intermediate host for the *Schistosoma japonicum* is?

- a. Sheep
- b. Snail\*
- C. Tapeworm.
- d Ascaris

e Heterophyes heterophyes

103) in diagnosis of parasitic infections, which of the followings is least commonly requested غير مطلوب

- a History
- B. Stool microscopic examination
- C. Macroscopic examination of the targeted sample
- d. Serology
- e. PCR

104) Entamoeba histolytica, one is wrong?

- a Rhizopoda.
- Endoparasite. b
- C Unicellular
- d. Has pseudopodia
- e Cause infestation\*

105) When rod shaped bacteria appears in pairs, it is known as? غير مطلوب

- a. Diplobacilli
- b Streptobacilli
- C Diplococcus
- d. Staphylococci
- e. Staphobain

106) An organism capable of growth at full oxygen tension of 21% is? غير مطلوب

- a. Oxygenic
- b. Microaerophilic
- c. Aerobic
- d. Anaerobic.
- e Capnophilic

107) Regarding viruses that play a role in human carcinogenesis, which one of the following statements is the most accurate?

- a. Epstein-Barr virus is implicated as the cause of nasopharyngeal Carcinoma. It is transmitted by mosquitoes
- b. Evidence for hepatitis C virus as a cause of hepatocellular carcinoma and a DNA copy of the HCV genome found integrate into the DNA of hepatocytes
- C. Hepatitis B virus is implicated as the cause of hepatocellular carcinoma and a DNA copy of the HBV genome found integrated into the DNA of hepatocytes\*
- d. The viral oncogenes contain introns.
- e Human Papillomavirus type 6 and 11 is associated with cervical cancer

108) The ethanol concentration that you used in the hand washing experiment was? غير مطلوب

- a 76%
- b. 80%
- c. 53%
- d. 99%
- e. 100%.

109) Regarding HTLV-1. all the following is false Except

- a. It is associated with Hepatocellular carcinoma
- B. It is a DNA tumor virus

C. is associated with Leukemia\*

D. It carries latent membrane protein 1 oncogene

e. It synthesises early protein that interact with p53

110) Who was one of the first people to suspect bacteria as the cause of infection and use an antiseptic to prevent infection غير مطلوب

a Lister

b. van Leeuwenhoek

C. Pasteur

D. Koch

e. Schleiden

111) All the following DNA viruses replicate in the nucleus EXCEL

Herpesvirus

Parvovirus

Pox viruses\*

Hepadnaviruses

Adenoviruses

112) An example for semi-continuous cell culture is? غير مطلوب

a Hela cells

b Hep2 cells

c. Primary monkey kidney

d. Human diploid fibroblasts

e Vero cells

113) Which of the followings is INCORRECT regarding tissue and blood nematodes?

- a. Microfilariae are ingested by arthropod vectors when feeding an interossos
- B. Infective larvae is ready for transmission in 2-3 weeks
- C. Larvae penetrate human skin pass to their habitat where they mature in almost 2 years ) and male\*
- d. Blood and tissue nematodes need arthropod vector
- C. No multiplication of larvae occur in the vector

114) Which of the followings is INCORRECT? غير مطلوب

- a. Brucellosis is due the ingestion of contaminated milk or cheese
- b. The clinical manifestations of Brucellosis range from subclinical to acute with fever and chills
- C. Humans acquire Legionella pneumophila by ingesting contaminated food
- d. Chlamydia grow and multiply intracellularly.
- e Rickettsias is transmitted via arthropod vectors

115) Cell walls of Viruses are made of a polymer called?

- a Cellulose
- B. Chitin
- C. Peptidoglycan
- D. The s layer
- e. Viruses do not have cell walls\*

116) How would you describe an organism that grows aerobically with only 4% O<sub>2</sub>? غير مطلوب

- a Strict (Obligate) Aerobes
- b. Microaerophilic.
- C. Aerotolerant anaerobe.



- d. Facultative anaerobe
- e Capnophilic organism.

117) Which of the followings is INCORRECT? غير مطلوب

- a. Neisseria can hide in the immune cells
- b. Neisseria can change their surface proteins
- C. Special requirements for the growth of Haemophilus
- d Treponema under light microscope shows tightly coiled shape
- e Trachoma occur particularly in children

118) Which of the followings causes diarrhea due to antibiotic treatment? غير مطلوب

- a. C difficile.
- b. H pylori
- C. S. aureus
- d C perfringens.
- e Chlamydia

119) Preventing amino acid translocation at P site of the bacterial 50s ribosomal subunit is achieved by? غير مطلوب

- a. Erythromycin.
- b. Clindamycin
- C. Tetracycline.
- d Chloramphenicol
- e Gentamycin

120) A patient diagnosed of having cholera, which of the following bacteriophage is the source of the cholera toxin غير مطلوب

- a T12
- b. CTX
- C. d Lambda phage
- Coryneophage beta.
- e Clostridial phages

121) In which phase of bacterial growth curve are the maximum of growth? غير مطلوب

- a Lag.
- b Exponential
- C. Stationary
- d Death
- e Eclipse

122) patient with measles, isolated in a single room, the following personal protective equipments are needed for infection prever A except? غير مطلوب

- a. Gown.
- b. Surgical mask.
- C. Hand hygiene
- d. Gloves
- e. Goggles

123) How would you describe an organism that grows aerobically with only 4% O<sub>2</sub>? غير مطلوب

- a Strict (Obligate) Aerobes
- B. Microaerophilic.
- Aerotolerant anaerobe

d Facultative anaerobe

E. Capnophilic organism

124) Which of the followings is INCORRECT? غير مطلوب

- a. Neisseria can hide in the immune cells.
- b. Neisseria can change their surface proteins,
- C. Special requirements for the growth of Haemophilus
- d. Treponema under light microscope shows tightly coiled shape.
- e. Trachoma occur particularly in children

125) Which statement regarding fungal growth and morphology is CORRECT?

- a Pseudohyphae are produced by all yeasts
- b. Molds produce hyphae that may or may not be partitioned with cross-walls or septa\*
- c Conidia are produced by sexual reproduction
- d Most yeasts reproduce by budding and lack cell walls
- e. Most pathogenic dimorphic molds produce hyphae in the host and yeasts at 30°C.

126) Which of the following is a polyene antifungal agent used for many life-threatening fungal infect غير مطلوب

- a Amphotericin B
- Griseofulvin D
- C Caspotungin
- a Miconazole
- e Nystatin

127) Which of the followings is INCORRECT? غير مطلوب

- a. Brucellosis is due the ingestion of contaminated milk or cheese
- b. The pinical manifestations of Brucellosis range from subclinical to acute with fever and
- C Humans acquire Legionella pneumophila by ingesting contaminated food
- d. Chlamydia grow and multiply intracellular
- e. Rickettsias is transmitted via arthropod vectors

128) The order of removing the personal protective equipment (PPE) is? غير مطلوب

- a. Gloves, gown, mask.
- b. Mask, gloves, goen.
- c. Mask gown, gloves.
- d. Gloves, mask, gown.
- e. Gown mask, gloves.

129) A 3 years child was seen by the pediatrician On examination, he suspected in meningitis. The CSF Gram staining showed a Gram negative diplococci bean shaped, Which of the followings you expect the causative agent? غير مطلوب

- a. Neisseria meningitides.
- b. Haemophilus influenzae.
- c. Bordetella pertussis
- d. E coli.
- e. Brucella

130) Microorganisms belonging to the same..... would be expected to have the most characteristics in common With each other غير مطلوب

- a Family
- B. Species
- C. Order
- d. Kingdom
- e. Genus

131) A facultative anaerobic is? غير مطلوب

- a. Only grow anaerobically
- b. Only grow in the presence of O<sub>2</sub>.
- c. Ordinarily anaerobe but can grow with CO<sub>2</sub>
- d Ordinarily anaerobe but can grow in presence or absence of O<sub>2</sub>.
- e Only grow aerobically

132) Which of the following criteria is used to categorize viruses in Baltimore viral classification scheme"? غير مطلوب

- a. The kind of the natural host
- b. The shape of the virus' capsid
- C. The size of the virus particle.
- d. The steps involved in the formation of viral mRNA after the virus has infected the cell
- One The presence or absence of an envelope

133) Organism A has GC-content of 80% and organism B has GC-content of 20% Which of the following can be concluded with these data? غير مطلوب

- a The two organisms are related
- b. The two organisms are unrelated

- c. The organisms are Gram positive
- d. Their nucleic acids will be hybridized.
- e. Nothing can be concluded from GC content information

134) Sterilisation is best described as? غير مطلوب

- A. Killing all forms of microbial life, including bacterial spores
- B. Using 70% alcohol or iodine to reduce the pathogenic organism on skin so they no longer cause
- C. Subjecting living healthy tissue to ethylene oxide to kill spores
- D. Killing viruses on living tissue by temperature
- E. Using sodium hydrochloride to disinfect skin

135) All of the following are characteristic of bacterial spore except? غير مطلوب

- a Usually dehydrated.
- b High resistant for heating
- C. Dormant, tough, and temporarily non-reproductive structure
- d. They consists of the bacterium's DNA and part of its cytoplasm surrounded by a very tough outer coating
- e. Can I live in nutrient deficient environment

136) Which of the following is INCORRECT? غير مطلوب

- a. Pertussis progress through more than one stage
- B. Pseudomonas causes secondary infections
- c. Spirochetes move by corkscrew movement
- D. Gamma hemolytic shows a clear zone around the bacterial growth
- E. Chlamydia can't be grown on blood culture

137) Regarding the eclipse period, one is TRUE? غير مطلوب

- a Virus is infectious during eclipse period
- b. It is the time from uptake of the virus to just before the assembly of the first intracellular Virus
- c. Has a universal fixed time period among all viruses
- d. Complete virus particle can be detected using electron microscope
- e Virus grow in size during eclipse period.

138) Which statement(s) is/are not true of the organisms in the domain Prokaryotes? غير مطلوب

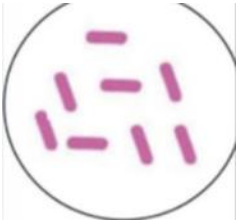
- a These organisms contain nucleus-bounded membrane
- b. These organisms may contain peptidoglycan in the cell walls
- C. These organisms have DNA and RNA polymerases
- D. These organisms contain one single chromosome
- e. These organisms may transfer DNA by conjugation method

139) The concept of spontaneous generation is that life could arise from? غير مطلوب

- a. Bacteria
- b. Viruses
- C. Yeast
- d. Fungi
- e Non living things,

140) Which one of the following is TRUE concerning viral capsids?

- a. Viruses acquire host proteins as their capsids
- b. Capsids are virus-specific proteins, which provide shape to viruses.\*
- C. Capsid protein subunits form a helix with core proteins to mainly provide cubic symmetry
- d. Helical nucleocapsids are found with single-stranded DNA viruses.
- e Capsids are lipid bilayer membranes containing proteins and/or glycoproteins



141)A definite sample of Gram positive bacilli was stained but the staining gave a Gram negative bacilli, where do you think the mistake mostly happened غير مطلوب

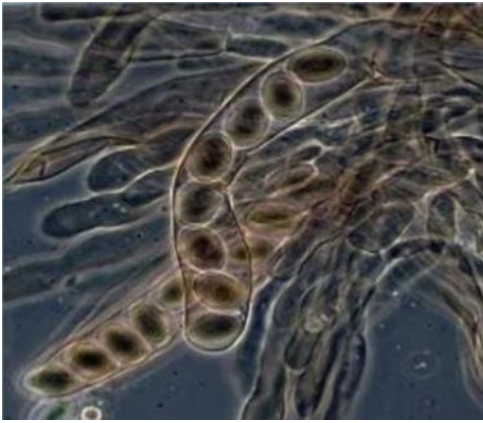
- a Fixation b Safranin
- c. Mordant treatment
- d. Acid alcohol e Crystal violet



142)Define the following structure of Fasciola?

- a. Testes
- b. Eggs.
- c. Cercaria\*
- d. Metacercaria
- e. e Miracidium





143) This figure represents? غير مطلوب

- a. Arthrospores
- b. Zygospores
- C. Basidiospores
- d. Ascospores
- e. Sporangiospores

144) This MacConkey agar plate shows pink colonies of \_\_\_\_\_ the indicator is \_\_\_\_\_?

- a E. coli, methyl red:
- b E coli, neutral red.\*
- c. Proteus, neutral red.
- d. Klebsiella, methyl red.
- e Enterobacter, phenol red.



145) What is the part A in the microscope is called?

- a. clips.
- b. ocular lens.\*
- C. stage.
- d. adjustment.
- e objective lenses



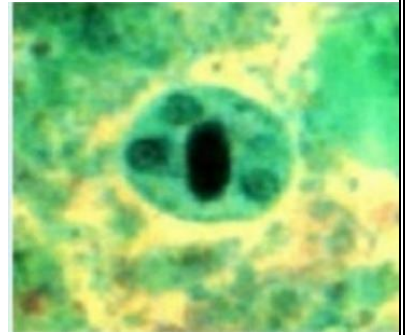
146) This quadrinucleate cyst (4 nuclei) was seen in stool sample from asymptomatic patient (patient with no symptoms, this is a cyst of?

a. *Entamoeba histolytica*\*

b. *Entamoeba coli*

c. *Toxoplasma gondii*

d. *Balantidium coli* e. *Giardia lamblia*



147) This figure demonstrates pigments of? غير مطلوب

a. *Pseudomonas aeruginosa*,

b. *E. coli*.

c. *Serratia marcescens*.

d. *S. aureus*

e. *Salmonella typhi*.



148) This figure represents?

a. Egg of *Diphyllobothrium latum*

b. Egg of *T. saginata*.

c. *T. solium* Egg

d. *Hymenolepis nana* ova.\*



149) This egg belongs to?

a. *Loa loa*

b. *Ascaris lumbricoides*,

c. *Enterobius vermicularis*.

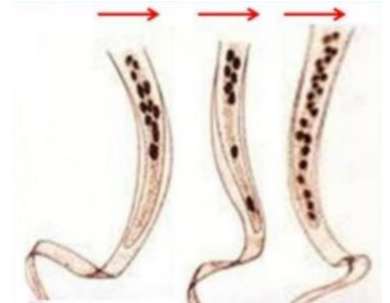
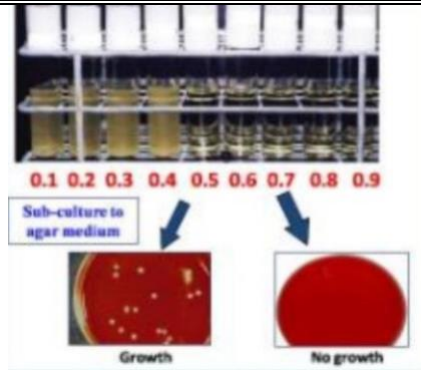
d. *Dracunculus medinensis*

e. *Echinococcus granulosus* egg



150) In the following test, the MIC is?

- a. 0.4 ug/ml.
- b. 0.6 pg/ml.
- c. 0.5 ug/ml.\*
- d. 0.7 pg/ml.
- e. 0.8 pg/ml.

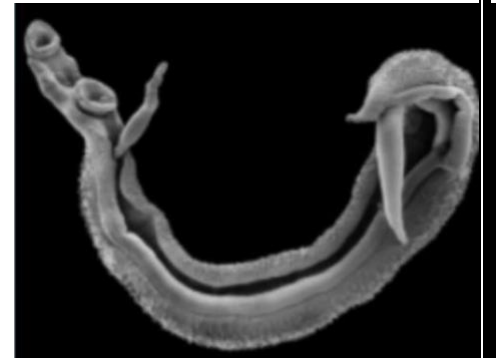


151) Choose the correct arrangement from left to right? غير مطلوب

- a. Wuchereria bancrofti, Brugia malayi, Loa loa.
- b. Loa loa, Wuchereria bancrofti, Brugia malayi.
- c. Loa loa, Enterobius vermicularis, Brugia malayi.
- d. Wuchereria bancrofti, Loa loa, Brugia malayi
- e. Ancylostoma duodenale, Loa loa, Brugia malayi.

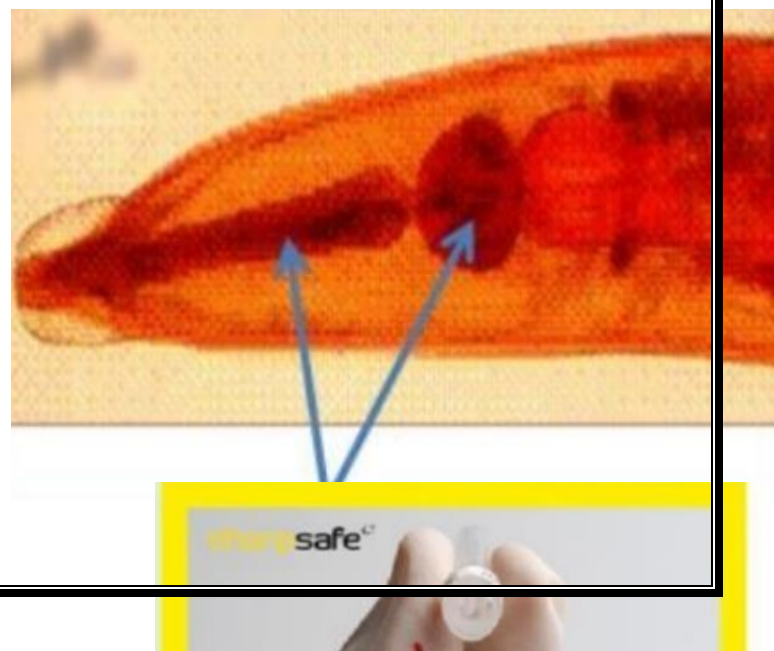
152) This couple is belonging to?

- a. Fasciola spp.
- b. Heterophyes heterophyes.
- c. Dendriticum Dicrocoelium.
- d. Schistosoma spp.\*
- e. Paragonimus westermani.



153) Arrows point to?

- a. Cellular oesophagus.
- b. Double bulbed oesophagus.\*
- c. Club shaped oesophagus
- d. Cylindrical oesophagus
- e. Rhabditiform oesophagus

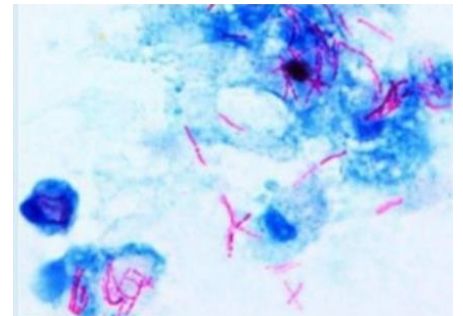


154) This action was wrong and it could transmit all of the following except غير مطلوب

- a. Hepatitis B
- b. Hepatitis C.
- c. HIV-1.
- d. HIV-2
- e. Vibrio cholera.

155) Which of the following is correct regarding this sputum sample stained by acid fast staining? غير مطلوب

- a. Carbofuchsin: counter staining
- b. Crystal violet primary staining
- c. Methylene blue primary staining
- d. Carbofuchsin Red color



e. Acid alcohol: 30 drops.

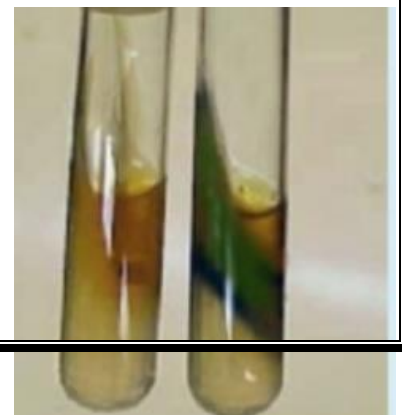
156) This is blackening in the media indicate? غير مطلوب

- a. Triple sugar iron agar, gas production
- b. TCBS agar, H<sub>2</sub>S production.
- c. Salmonella -Shigella agar, gas production.
- d. Mannitol salt agar, sugar fermentation,
- e. Triple sugar iron agar H<sub>2</sub>S production



157) This test is? غير مطلوب

- a. Phenylalanine hydroxylase test.
- b. Lysine Decarboxylase Test
- c. Phenylalanine deaminase test.
- d. Arginine decarboxylase test e Citrate utilization test.



158)The following life stage is belonging to which trematodes?

- a Fasciola hepatica
- b. Heterophyes heterophyes
- c Dendriticum Dicrocoelium
- d. Schistosoma spp
- e Paragonimus westermani\*



159)The main immune respons against Helminths is mediated by? غير مطلوب

Select on :

- a. TH1 cells
- b. Antibody production
- C. TH17 cells
- d. TH2 cells
- e. Macrophages

160)All trematodes are hermaphrodite except ?

Select one :

- a. Fasciola spp
- b. Heterophyes heterophyes
- c. Dendriticum Dicrocoelium
- d. Schistosoma spp\*

One Paragonimus westermani.e

161)The medium that contains antibiotics is called a(n)?

Select one :

- A. Enriched medium

- b. Differential medium
- C. Selective medium
- d. Inhibitory medium
- e. Basal medium

162) **A granuloma is a complication of over-reaction against?**

**Select one :**

- A schistosoma eggs
- b. Leaking Hydatid cyst
- C. Migrating larvae of ascaris
- d. Cross reaction with malaria antigens
- e. Deposition of immune complexes

163) **Which of the following drugs inhibits ergosterol synthesis, is important in treating systemic fungal infection?**

**Select one :**

- a. Amphotericin
- b. Fluconazole
- C. Griseofulvin
- d. Echinocand

164) **Which of the followings is mismatched?**

**Select one :**

- a. Skin penetration: Strongyloides Rhabditiform larvae
- B. Larvae encyst in skeletal muscles Trichenill
- c. Ingestion of infective larvae Trichenella
- d. matureate i Trichuris n the intestine without migratory phase Enterobius

Eggs :Enterobius

e. Ingestion of embryonated

**165) Antigen mimicry is an example of escape of?**

**Select one :**

- a. Schistosoma
- b. Plasmodium
- C. Malaria
- d. Trypanosome
- e. Ascaris

**166) Entamoeba histolytica, one is wrong\*\***

**Select one :**

- A. Cyst is a diagnostic stage
- b. Trophozoite has 1 nucleus
- c. Cyst has 4-8 nuclei
- d. Man is a definitive host
- e. Pseudopodia are only seen in trophozoites not in cysts

**167) Which is the oncoproteins of HHV-8 that impairs P53 and RB proteins?**

**Select one :**

- a. EBNA3C
- b. HBx oncoprotein
- C. Latency-associated nuclear antigen
- d. Latent membrane protein 1

**168) Which of the followings is CORRECT regarding the diagnosis of parasitic infection?**

**Select one :**

- a. The concentration methods is used if parasitic infection is heavy
- b. The low specific gravity solutions are used in the floatation technique

- C. The formol ether is used to harvest eggs from the surface of the fluid
- d. Zinc sulphate is used for sedimentation
- e. Eggs on surface when used saturated sodium **chloride**

**169)A patient whose major source of protein is smoked and cooked fish develops what appears to be pernicious anemia What parasite is noted for causing a look-alike vitamin B12 anemia in certain infected individuals?**

**Select one :**

- a. Echinococcus granulosu
- b. Diphylobothrium latum
- C. Hymenolepis nana
- d. Dipylidum caninum
- e. Taenia solium

**170) Which of the followings is mismatched?**

**Select one :**

- A. Skin penetration: Strongyloides Rhabditiform larvae
- b. Larvae encyst in skeletal muscles Trichenilla
- c. Ingestion of infective larvae. Trichenella
- d. mature in the intestine without migratory phase Enterobius
- E. Ingestion of emryonated eggs: Enterobius and Trichuris and Ascaris

**171)Which of the followings is mismatched?**

**Select one :**

- a Skin penetration: Strongyloides Rhabditiform larvae.
- b. Larvae encyst in skeletal muscles Trichenilla
- C. Ingestion of emryonated eggs : Enterobius and Trichuris and Ascaris.
- d. mature in the intestine without migratory phase Enterobius

**172)All are correct regarding Mycobacterium EXCEPT?**



**Select one :**

- a. Gram-negative irregular bacill
- b. Acid-fast staining due to the presence of mycolic acids
- c. Strict aerobes
- d. Grow slowly in the lab
- e. Virulence factors that prevent destruction by lysosomes or macrophages

**173)The slow virus disease that MOST Clearly has immunosuppression as an important factor in its pathogenesis is?**

**Select one :**

- a. Subacute sclerosing panencephalitis
- D. Creutzfeldt-Jakob disease
- C. Kuru
- d. Progressive multifocal leukoencephalopathy
- e. Scrapie

**174)Immune suppression is an example of escape?**

**Select one :**

- a. Schistosoma
- b. Plasmodium
- c M. ularia
- D. Leishmania
- e. Ascaris

**175)All are correct EXCEPT? \*\***

**Select on :**

Tissue nematodes as oviparous a.

**176)Proof that a microorganism could cause a disease was provided by?**

**Select one :**

- Pasteur a.
- b. Lister
- C. Koch
- d. Wasserman
- e. Redi

**177)Interaction between two viruses infecting the same cell at the functional level but not at the genom?**

**Select one :**

- a. Complementatio
- b. Genetic reassortment
- C. Phenotypic masking
- d. Phenotypic mixing
- e. Recombination

**178)Regarding Taenia solium, which one of the following is most accurate?**

**Select one :**

- a. The drug of choice for the adult worm in humans is metronidazole
- b. The cysticercus of T. solium contains the mature eggs of the organism
- c. In the laboratory, identification of adult worms is based on finding the typical
- d. Ingestion of the terminal proglottids of T. solium by pigs results in mature tap
- e. The scolex of T. solium has four suckers and a circle of hooklets

**179)Chemical reaction that makes small particles to be more complex component?**

**Select one :**

- b. Oxidized
- d. Anabolism

**180)Wuchereria bancrofti infection occurs through?**

**Select one :**

- a. Blood transfusion
- b. Autoinfection.
- c. Ingestion of cyclop
- d. Penetration of the skin by filariform larva through insect bite
- e. Ingestion of undercooked meat

**181)Viruses that grow at permissive temperature but not at restrictive temperature are called?**

**Select one :**

- Attenuated mutants a.
- Conditional lethal mutants b.
- Antigenic variamts c.
- Defective interfering particles d.
- Drug resistant mutants e.

**182)Reproduction via binary fission leads to what type of growth under optimal conditions?**

**Select one :**

- a. linear
- b. mixed
- C. exponential
- d. uptake-limited
- e. iintermittent

**183) of the following statements best describes the cytopathic effects of viruses on host cells?**

**Select one :**

Usually morphology in nature a.

Often associated with changes in mitochondrial membranes b

C. Pathognomonic for an infecting virus

d. Rarely fatal to the host cell

E. Can only be seen with an electron microscope

**184) All of the followings characterize *E. histolytica* vegetative form except**

**Select one :**

a. Pseudopodia

b. Ingested RBCs

c. One nucleus

d. Nucleoplasm

e. Pangranular cytoplasm

**185) Autoinfection occurs in infection with?**

*Diphyllobothrium latum* a.

*Echinococcus granulosus* .b

*Taenia solium* c.

*Hymenolepis nana* d.

**186) Halophiles can tolerate? \*\***

**Select one:**

Temperatures above 100 C a.

A vitamin – depleted medium b.

c. 5%-10% NaCl

D. pH < 5.5

e. tolerate high nitrogen environment

**187)The arrangement of steps of viral replication is as follows?**

**Select one :**

- a Attachment, Uncoating, Penetration Nucleic acid and protein synthesis, Assembly and Release
- B. Attachment, Penetration, Uncoating, Nucleic acid and protein synthesis. Assembly and Release.
- C. Attachment, Penetration, Nucleic acid and protein synthesis, Uncoating, Assembly and Release
- d. Attachment, Penetration, Uncoating, Nucleic acid and protein synthesis, Release and Assembly
- e. Attachment, Penetration, Uncoating. Assembly. Nucleic acid and protein synthesis and Release

**188)The 5<sup>th</sup> step in hand washing is?**

**Select one :**

- a. Rub hands palm to palm
- b. Rub pater to palm with fingers interfaced
- c Rub tips of fingers in opposite palim in a circular motion
- d. Use elbow to turn off tap
- e. Rub each wrist with opposite hand

**189)Ribavirin is?\***

MRNA inhibitor a.

B. . Protease inhibitor

c. Neuraminidase inhibitor

b. Inhibitor of nucleic acid synthesi

**190)Which of the followings is an example on transmission by fecal oral route?**

**Select one :**

- a. Tuberculosis
- b. Pertussis (whooping cough)
- Hepatitis A . c
- d. Hepatitis C.

e. Hepatitis B

**191) Which of the followings is INCORRECT regarding nematodes?**

**Select one :**

- a. The filariform larvae have cylindrical oesophagus
- b. Lumbricoides is one of the commonest and most wide spread of all human parasites.
- c. The filariform larvae of the pin worm *Strongyloides stercoralis* is the infective stage

**192) Which of the followings settles in small intestine and has a tissue stage?**

**Select one :**

- A. *Strongyloides stercoralis*
- b. *Enterobius vermicularis*
- c. *Trichuris trichiura*
- d. *Loa loa*

**193) At a party, a student consumed sushi which contained fish from Canada. If a parasite becomes established from this raw fish consumption, which of the following is the most likely?**

**Select one :**

- A. The fish contain a proceroid larva
- d. These students will act as intermediate host
- c. Oocysts is formed
- d. The fish contain a plerocercoid larva

**194) Which of the followings is INCORRECT ?**

**Select one :**

- a. Pertussis progress through three stages of disease
- b. *Pseudomonads* cause opportunistic infection

C. Spirochetes move in a corkscrew fashion through its environment

d. Beta-hemolytic complete hemolysis of red blood cells

e. Chlamydia can be isolated using special agar media

**195) All are correct regarding Mycobacterium EXCEPT?**

**Select one :**

Gram-negative irregular bacilli a.

b. Acid-fast staining due to the presence of mycolic acids

Strict aerobes c.

d. Grow slowly in the lab

**196) Which of the following fungi produces poisonous substance mycotoxin called aflatoxin?**

**Select one :**

Candida albicans a.

Mucor b.

Aspergillus flavus c.

Rhizopus d.

Amanita mushroom e.

**197) The role of antibody against schistosomes is mainly to?**

**Select one :**

Act as direct damage by complement mediated a.

ADCC do b.

**198) A type of cell culture that can reproduce for an extended number of generations and is used to support viral replication is?**

**Select one :**

Primary cell culture a.

Cell strain b.

C. Diploid fibroblast cell?

d. Connective tissue

Continuous cell line e.

**199)The infective stage of Fasciola hepatica is?**

**Select one:**

Sporocyst a.

Redia b.

Cercaria c.

Metacercaria d.

Egg E.

**200)All are correct regarding diagnosis of parasitic infections EXCEPT?**

**Select one:**

b. The most common preservative used is 1% formalin

**\*\*\*Which of the followings is CORRECT regarding the diagnosis of parasitic infection?**

**Select one :**

Eggs on surface when used saturated sodium chloride.

**201)Entamoeba coli, one is TRUE \*\*\***

**Select one :**

A. Appears as gram negative rods

b. Mononucleated trophozoite with large eccentric karyosome

C. Appears as gram positive rods

d. Metronidazole is the treatment of choice in symptomatic patients

e. Flask shaped ulcer confirms its diagnosis.

**202)Which is the oncoproteins of HHV-8 that impairs P53 and RB proteins?**

**Select one :**

a. EBNA3C

b. HBx oncoprotein



c. Latency – associated nuclear antigen

d. Latent membrane protein 1

e. E6 oncoprotein

**203) Which one of the following is most characteristic of the changes seen in Cytomegalovirus infected cells that are visible in the light microscope after suitable staining?**

**Select one :**

a. Basophilic inclusion bodies in the cytoplasm

b. Basophilic inclusion bodies in the nucleus

c. Eosinophilic inclusion bodies in the nucleus

d. Eosinophilic inclusion bodies in the cytoplasm

Transformation of normal cells into cancer cells. E

**204) Lugol's iodine is used to study the\*\*\***

Select one:

Cyst a.

Glycogen vacuole in cyst b.

**205) Each of the following statements concerning hydatid cyst disease is correct EXCEPT\*\*\***

Select one

a. The disease is caused by Echinococcus granulosus

b. The liver is one of the affected organs

c. The disease is caused by a parasite whose adult form lives in dogs' intestines

d. The main mode of transmission to humans is ingestion of eggs in food or water contaminated with human feces

e. The causative organism is one of the short tapeworms

**206) A filamentous fungus subunit is a?\*\*\***

**Select one:**

a. Coenocyte

b. Hypha

c. Mycelium

**207)Which statement regarding fungal cell walls is correct**

**Select one :**

- a. The major components of fungal cell walls are proteins such as chitin and glucans
- b. The cell wall is not essential for fungal viability or survival
- c. Ligands associated with the cell walls of certain fungi mediate attachment to host cells

**208)Regarding viral factors involved in the pathogenesis of viral diseases, all the following are true EXCEPT?**

**Select one :**

- a. Viruses could enter into the host through mucosa of the respiratory tract
- b. Insect bite could transmit viral infection
- Viral attachment proteins interact with cellular receptor c.
- d. Viral virulence is genetically determined
- E. Viral virulence increases with attenuated strains of virus

**209)The moments to wash hands in the ward include?**

**Select one?**

- Before patient contact a.
- Before aseptic task b.
- After body fluid exposure c.
- After patient contact d.
- All choices e.

**210)The action of the following antibacterials rely on host immunity to eradicate infections EXCEPT?**

**Select one :**

- a. Tetracyclines

- b. Chloramphenicol
- c. Clindamycin
- d. Bacitracin

211) A parasite that causes a disease in immunosuppressed patients is termed

Select one :

- A. Facultative
- b. Opportunistic

212) The infective stage for the *Schistosoma japonicum* is?

Select one :

- a. Cercaria
- b. Snail
- C. Tapeworm
- .d. Radio

213) Inhibition of chromosomal supercoiling in bacteria is the mode of action of?

Select one?

- a. Ciprofloxacin
- b. Rifampin
- c. Vancomycin
- d. Synergistic effect of penicillin and aminoglycosides

214) In the stool's technique for counting helminth eggs, if the number of eggs in 3 am stool was 27, the number of eggs in the original

sample will be?

- A. 270
- .b. 2700
- c. 5400
- E. 8100

215) All of the following characterize *E. histolytica* vegetative forms except?

**Select one :**

Multiply by binary fission a. .

May be found in descending and transverse colon b

May pass in the stool and remain for days in the environment to reinfect again c.

**216) In the mode of transmission for Schistosoma mansoni, the penetration is in**

**Select one**

a. Mucus

b. Intestine

c. Skin

D. Blood

C. Ear

**217) Oncogenic virus could evade the host immune response through?**

**Select one :**

a. maintaining episomal copies of viral genome in transformed cells

b. incorporating the viral genome into host cell genome

C. inducing chronicity of the infections

d. induction of tumorigenesis after latent period

E. Restriction of expression of viral genome

**218) Hepatitis C virus infection is?\*\*\***

**Select one**

a. Inapparent infection

b. Acute infection

C. Persistent infection

. Latent infection d

E. Slow infection

219) **Compared to 70% alcohol, the 99% alcohol is not recommended in disinfection because?**

**Select one :**

- a. It is more volatile
- b. Higher risk of skin irritation
- c. More flammable
- d. it coagulates organism's proteins causing less penetration to the organism
- e. All of the mentioned choices

220) **An RNA tumor virus associated with the neurologic disease called tropical spastic paraparesis is?**

**Select one :**

- a. Hepatitis B virus infection
- b. Human papillomavirus
- c. Human T-lymphotropic virus type 1
- d. Human immunodeficiency virus

221) **The bacteriophage ----- infects-----and is associated with scarlet fever?**

**Select one :**

- a. Corynebacterium phage beta, Corynebacterium diphtheriae
- b. Lambda phage, Escherichia coli
- c. Erythrogenic toxins, Streptococcus pyogenes
- d. CTX phage Vibrio cholerae
- e. Clostridial phages. Clostridium botulinum

222) **The 5<sup>th</sup> step in hand washing is?\*\*\*\***

**Select one :**

- a. Rub hands palm to palm
- b. Rub palm to palm with fingers interlaced.
- c. Rub tips of fingers in opposite palm in a circular motion

- D. Use elbow to turn off tap
- E. Rub each wrist with opposite hand

**223) Teichoic acid is?\***

**Select one :**

- a. Found in the walls of Gram positive bacteria
- b. Provide receptors for conjugation phages
- c. Make up outer wall of Gram negative bacteria
- d. Influence the permeability of the membrane
- e. play role in bacterial multiplication

**224) Positive result of the complement fixation reaction is expressed in?**

**Select one:**

- a. Complete hemolysis
- b. Haemagglutination.
- c. Inhibition of Haemagglutination
- d. Color change after adding the substrate
- e. Complete inhibition of hemolysis

**225) Which of the followings is INCORRECT?**

Select one:

- a. Coagulase negative staphylococci frequently involved in opportunistic infections.
- b. *S. epidermidis* can be easily isolated from skin
- c. Coagulase positive *S. saprophyticus* frequently lives on skin, intestine, and vagina
- d. *S. aureus* can cause serious infections.
- e. Catalase test is used to distinguish between Staphylococci and Streptococci

**226) Ribosomes are the factory of \_\_\_ synthesis?**

Select one:

- a. Protein
- b. Plasmid

c.Sugar

d.Lipid

e.DNA

227)An RNA virus that has a nuclear phase in its replication process is?

Select one:

a.Coronavirus

b.Rhabdovirus.

c.Retrovirus

d.Togavirus

e.Caliciviruses

228) On analysis of a virus, it reveals the genome to be composed of eight segments of single - stranded RNA complementary to viral mRNA in infected cells. Which one of the following statements is UNLIKELY to be correct?

Select one:

a.Diferent proteins are encoded by each segment of the viral genome.

b.The virus particle contains vital encoded enzyme that can copy the genome into its complement

c.Purified RNA extracted from the virus particle is infectious

d.The virus RNA segments can undergo reassortment

e.This virus is an orthomyxovirus

229)Bacterial flagella surrounding all the body is called?

Select one:

a.Penitrichous

b.Amphitrichous

c.Lophotrichous

d.Monotrichous

e.Ditrichous

230)Which of the followings is mismatched?

Select one:

- a.E.coli: Diarrhea affects the proximal small bowel
- b.S.enteritidis Dysentery affects the colon
- c.V.cholera non - nfiammatory Diarrhea
- d.S typhi Invasive infection affects the proximal small bowel
- e.Shigella Invasive Inflammatory infection affects the colon

231)Genotypic methods of microbe identification include all the following EXCEPT?

Select one:

- a.Nucleic acid sequence analysis.
- b.rRNA analysis.
- c.Direct whole pathogen agglutination assays.
- d.Restriction fragment length polymorphism.
- e. Plasmid fingerprinting.

232)Infection control measures include all of the followings EXCEPT?

Select one:

- a.Bare above elbow.
- b.No ties.
- c.No coats.
- d.Cover open wounds with occlusive adhesive.
- e.Keep nails tall to help you pick small objects

234)Which of the followings has a spiral shape?

Select one:



- a. Neisseria
- b. Treponema
- c. Chlamydia
- d. E. coli
- e. Yersinia

235) Killing food pathogens without damaging the nutritional value or flavor is obtained by?

Select one:

- a. Autoclaving
- b. UV light
- c. Filtration
- d. Oven
- e. Pasteurization

236) Which of the followings is INCORRECT?

Select one :

- a. A tube is required to transfer the whole plasmid during conjugation.
- b. Scarlet fever is caused by a acquiring new genetic material
- c. Muscular stiffness can be seen under inappropriate food handling
- d. The anaerobic *C. perfringens* causes discoloration of the skin
- e. *Legionella pneumophila* can be isolated from the air conditioning ducts

237) A patient came to the emergency department suffering from certain clinical manifestations. The doctor decided to amputate his leg.

Which of the following pathogens might be associated with this case ?

Select one :

- a. *Clostridium perfringens*
- b. *Bordetella pertussis*

C. Bacillus cereus

d. Clostridium tetani

e. Clostridium botulinum.

238) Phagovar is an intra-subspecific designation depends on?

Select one:

a. Special biochemical or physiological properties

b. Distinctive antigenic properties

C. Pathogenic properties for certain hosts

d. Ability to be lysed by certain bacterial viruses.

e. Special morphologic features.

239) A patient suffering from a difficulty in breathing, a Gram staining from the infected area showed Gram-negative cocco-bacilli, for which of the following an empirical therapy should be given?

Select one:

a. Proteus

b. Bordetella pertussis

C. Neisseria meningitides

d. Clostridium tetani.

e. E. coli

240) A patient with tuberculosis, isolated in a single room, the following personal protective equipments are needed for complete protection except?

Select one:

a. Gown

b. Surgical mask

C. hand hygiene.

d. Gloves

e.Goggles

241)Viropexis is?

Select one :

- a.the separation of the capsid from the viral genome
- b.a receptor-mediated endocytosis.
- c.a process by which enveloped viruses obtain their envelope
- d.the interaction of viral attachment proteins and specific host-cell receptor sites
- e.regulated by host-cell DNA-dependent RNA polymerases .

242)Which of the following represents a difference between viruses and viroids?

Select one:

- a.Viruses infect many types of cells, whereas viroids infect only prokaryotic cells
- b.Viruses have capsids composed of protein, whereas viroids have no capsids
- c.Viruses contain introns, viroids have only exons
- d.Viruses always have genomes composed of RNA, whereas viroids always have genomes composed of DNA
- e.Viruses cannot pass through bacterial filters, viroids can.

243)After using a syringe to take a blood sample, one of the following is TRUE?

Select one:

- a.Recap the needle immediately
- b.Leave the syringe on the patient's bed, wait an hour then recap the needle.
- C.Swap the needle with alcohol then recap the needle.
- d.Never recap the needle and discard the syringe in the yellow sharps bin
- e.Throw the syringe in the black plastic bag .

244)Which of the followings can be isolated from food and can cause flaccid paralysis?

Select one:

- a. Clostridium botulinum
- b. Bordetella pertussis.
- c. Bacillus anthracis
- d. Neisseria meningitides
- e. Haemophilus influenza

245) The order of wearing the personal protective equipment (PPE) is?

Select one:

- a. Gown, mask, gloves
- b. Mask, gloves, gown
- c. Gloves, gown, mask
- d. Mask, gown, gloves
- e. Gown, gloves, masks.

246) Which of the followings is INCORRECT?

Select one:

- a. S. aureus is catalase and coagulase positive.
- b. Group B streptococcus is beta hemolytic
- c. The non-spore forming Bacillus cereus causes food poisoning
- d. Clostridium tetani produces spores
- e. Clostridium botulinum interferes with release of acetylcholine

247) Most of pathogenic bacteria can live in the following temperature rate?

Select one:

- a. Mesophile
- b. Psychrophile.
- c. Thermophile.

d. Capnophils.

e. Hyperthermophile.

248) Extreme halophiles are characterized by?

Select one:

a. Requiring high levels of carbon for growth

b. Requiring high levels of Nitrogen for growth

c. Requiring high level of Copper for growth d. Requiring high levels of Zinc for growth

e. Requiring high levels of Salts for growth.

249) Aerobic bacteria are?

Select one :

a. Only grow anaerobically

b. Only grow in the presence of  $\text{CO}_2$

c. Ordinarily anaerobic but can grow with  $\text{CO}_2$ .

d. Ordinarily aerobic but can grow in absence of  $\text{O}_2$  .

e. Only grow aerobically .

250) Which of the following structures can pass from one bacterium to another?

Select one:

a. Plasmid

b. Pilus

c. Capsule

d. Plasma Membrane

e. Cell wall

251) One of the following antibiotic families is bactericidal and preferred in cases of meningitis?

Select one:

- a. Tetracyclines
- b. Chloramphenicol
- c. Cephalosporins.
- d. Macrolides
- e. Clindamycin.

252) Chain of infection, which of the following is WRONG?

Select one:

- a. Bacteria as an example of the infectious agent.
- b. Portal of entry and exit and can be the blood.
- c. Method of transmission such as respiratory droplets
- d. Susceptible host includes only the immunocompromised/weak immunity people.
- e. Soil can be the reservoir.

253) Which of the following is Gram negative diplococcus?

Select one:

- a. *N. gonorrhoeae*
- b. *Staphylococcus aureus*
- c. *H. pylori*
- d. *S. pneumoniae*
- e. *Proteus*

254) Which of the following is the most important structure related to adhesion to other cells and surfaces?

Select one:

- a. Flagellum.
- b. Fimbriae
- c. Peptidoglycan

d.Pilli

e.Cel wall

255)A 3 years child was seen by the pediatrician On examination, suspected of having meningitis The CSF Gram staining showed a Gram negative coccobacilli Which of the following you expect the causative agent?

Select one :

a.N meningitides

b. H. influenzae

C.E. Coli

d.N. gonorrhoeae

e.Proteus

256) Sterilizing an endoscope in gastrointestinal units is best achieved by?

Select one :

a.Iodine.

b.Tyndallisation.

c.Inspissations.

d.Ethylene oxide.

e.Filtration .

257)Which of the following structures is never present in a Prokaryotic cell?

Select one :

a.Cell wall.

b.Plasmid.

C.Ribosome.

d.Membrane-bound nucleus.

e.Cell membrane.

258) Items such as media, liquids, and instruments are usually autoclaved at?

Select one:

- a. 121°C For 15 minutes
- b. 63°C for 30 minutes.
- c. 72°C for 15 seconds.
- d. 100°C for 15 minutes.
- e. 160-170°C for 1-2 hrs.

259) The inhibition of acetylcholine release into the neuromuscular junction is mediated by?

Select one:

- a. *Corynebacterium diphtheriae*.
- b. *Bordetella pertussis*.
- c. *Bacillus anthracis*.
- d. *Clostridium tetani*....

260) Which of the followings is an example on transmission by droplet nuclei (airborne)?

Select one:

- a. *E. coli*
- b. Measles.
- c. Hepatitis E
- d. HIV (Human Immunodeficiency Virus).
- e. Hepatitis A

261) Which pair of microorganisms would you expect to be MOST closely related?

Select one :

- a. Yeasts and actinomycetes
- b. *Staphylococcus* and *Escherichia*
- c. *Enterobacter aerogenes* and *Enterobacter cloacae*.



d. Streptococcus pyogenes type a and Streptococcus pyogenes type b.

e. Micrococcus and Staphylococcus.

262) When a bacteriophage is integrated into a cellular genome it is called a?

Select one:

a. virulent virus.

b. lytic virus.

c. prophage

d. transducing virus

e. microphage

263) Two bacteria are start growing in ideal growth environment,

How many organisms after three growth cycles you will count?

Select one :

a. 2

b. 4

c. 8

d. 16

e. 32

264) Cell walls of Fungi are made of a polymer called?

Select one:

a. Cellulose.

b. Chitin.

c. Peptidoglycan

d. The S-layer.

e. Fungi do not have cell walls

265) Zoonotic infection, which of the followings is TRUE?

Select one:

- a. Refers to infections coming to humans from animals and they represent a major health challenge
- b. Refers to infections from human to animals leading to decrease available livestock
- c. Is mainly a hospital acquired infections
- d. They are not subjected to the chain of infection stages
- e. It refers to infections between animals in the zoo

266) Which of the followings is INCORRECT regarding bacterial genetics?

Select one:

- a. Bacteria take up DNA from their environment through a process called transformation.
- b. The movement of DNA between bacteria by viruses is called transduction
- c. Conjugation is the direct transfer of DNA by bacteria via plasmids.
- d. Cloning is an artificial transformation.
- e. In the lysogenic cycle the bacteriophage directly undergo replication and cell lysis.

267) Salt and sugar preserve foods because they?

Select one:

- a. Deplete nutrients
- b. Transforming the nature of food
- c. Make them acid.
- d. Produce a free toxic form of Oxygen.
- e. Produce a hypertonic environment.

268) When a group of bacteria are divided and remain attached together like a grape this arrangement is called?

Select one:

- a. Diplo.

- b.Mono.
- c.Tetrad.
- d.Strepto
- e.Staphylo.

269)MacConkey agar is considered a?

Select one :

- a.Basal media
- b.Transport media.
- C.Storage media.
- d.Enriched media.
- e.Differential media.

270)Antisepsis is best described as?

Select one:

- a.Using alcohol or iodine to reduce the pathogenic organisms on skin so they no longer represent a pathogenic risk.
- b.100% killing of all forms of microbial life on living tissue such as skin.
- C.Subjecting living healthy tissue to ethylene oxide to kill spores.
- d.Killing viruses on living tissue by temperature.
- e.Using sodium hypochlorite to disinfect skin.

271)In treating infections, antibiotics should be used with precaution in which of the followings?

Select one :

- a.Those with history of antibiotic hypersensitivity (allergy).
- b.Pregnants.
- C.Children
- d.patients with impaired kidney functions.

e.All mentioned choices.

272)In treating infections, antibiotics should be used with precaution in which of the followings?

Select one :

- a.Those with history of antibiotic hypersensitivity (allergy).
- b.Pregnants.
- C.Children
- d.Patients with impaired kidney functions.
- e.All mentioned choices.

273)Viral envelope consists of?

Select one:

- a.Viral glycoproteins and host lipids.
- b.Viral lipids and Host glycoproteins.
- c.Carbohydrates and host lipids.
- d.Only host-cell-derived lipids
- e.Only Viral glycoproteins.

274)Which of the following is CORRECT?

Select one:

- a.Neisseria meningitidis has no capsule
- b.Helicobacter pylon has no flagella.
- C.Rickettsia are obligate extracellular parasites with regular shapes.
- d.Shigella is a gram positive
- e. Neisseria meningitidis can reach the CNS.

275)What is the function of reverse transcriptase in retroviruses?

Select one :

- a.It hydrolyzes the host cells DNA
- b.It uses viral RNA as a template for DNA synthesis
- C.It converts host cell RNA into viral DNA
- d.It translates viral RNA into proteins
- e.It uses viral RNA as a template for making complementary RNA strands

276)In which phase of bacterial growth are the number of growing equal the number of dying bacteria?

Select one :

- a.Lag
- b.Log
- C.Stationary.
- d.Death.
- e.Eclipse.

278)One of the following antibiotics acts by net inhibiting purines synthesis?

Select one:

- a.Oxolinic acid.
- b.Trimethoprim.
- c.Chloramphenicol.
- d.Tetracycline.
- e.Cephalosporin.

279)Hepatitis D virus is?

Select one:

- a.A prion
- b.A defective virus
- C.Pseudovirion

d.Viroid

e.Molecule of RNA with no capsid protein or envelope

\_281)Single-stranded DNA is the genetic material of?

Select one:

a.Caliciviruses

b.Flaviviruses.

C.Papillomaviruses.

d.Parvoviruses.

e.Herpesviruses.

\_282)Which of the following is characteristic of the lytic cycle?

Select one:

a.Many bacterial cells containing viral DNA are produced.

b.Viral DNA is incorporated into the host genome.

C.The viral genome replicates without destroying the host.

d.A large number of phages is released at a time

e.The virus-host relationship usually lasts for generations.

\_283)Which of the followings is an example on transmission by respiratory droplet?

Select one :

a.Enterococcus faecalis.

b.Diphtheria

C.Hepatitis

d.Cholera.

e.Hepatitis

284) Which of the followings can be isolated from a rusty nail and can interfere with the normal muscle contraction?

Select one :

- a. Clostridium tetani
- b. Bordetella pertussis.
- c. Bacillus anthracis.
- d. Neisseria meningitides.
- e. Haemophilus influenza.

285) Which of the followings is INCORRECT regarding Clostridium difficile?

Select one :

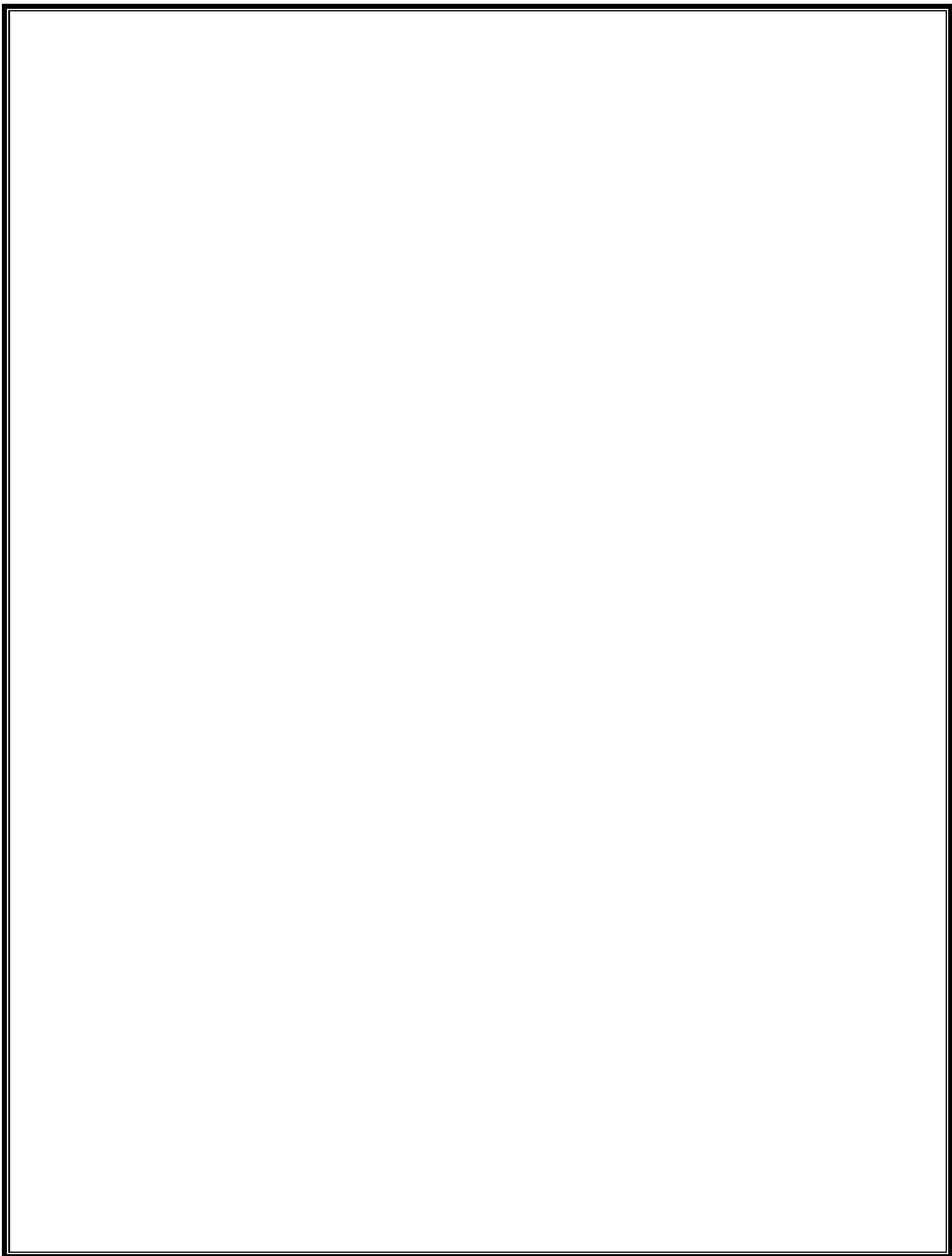
- a. Normal flora of the colon with high numbers in the stool.
- b. Opportunistic bacteria.
- c. Causes antibiotic associated colitis.
- d. Enterotoxins that damage intestine
- e. Major cause of diarrhea in hospitals

286) The cell wall of gram-negative bacteria may contribute to the development of septic shock. Identify the component

which is most associated with the induction of septic shock?

Select one:

- a. Capsular protein
- b. Lipopolysaccharide
- c. Peptidoglycan
- d. Phospholipid
- e. Teichoic acid





أرشيف أسئلة – دفعة وريد

**microbiology – final exam**

Done by :



**1) Correct statement about fungi ?**

- A. Their cell membrane consist of Ergosterol. XXX
- B. Some fungi are dimorphic , in enviroment are yeast and in human are mold

**2) Abuse of antibiotics ?**

- A. Dead
- B. hypersensetivity rxn
- C. impaired liver
- D. impaired kidney
- E. all of above XXX

**3)About sputum test, the incorrect one ?**

- A. Add on a sputum sample equal volume of HCL to dissolve the mucus XXX
- B. Add on a sputum sample equal volume of NaOH to dissolve the mucus
- C. Centrifuge at 200xg for 5 minutes

**4) Incorrect**

inactivated vaccines - IgA mucosal immunity present

**5) A parasite that is capable of living both freely and as parasite :**

- A. Obligatory parasite
- B. Ectoparasite
- C. Facultitive parasite xxx
- D. Opportunistic parasite
- E. Coprozic parasite

**6)Preservation of stool specimens, incorrect one ?**

- preservative used 1% formalin.

**7) The host which harbours the parasite which is not normally found :**

- A. R.H
- B. D.H
- C. Accidental host XXX
- D. I.H

**8)The Baltimore classification of viruses based on:**

Mechanism of mRNA production

**9)The relationship between entamoeba coli and human is :**

- A. Commensalism XXX
- B. mutuliam
- C. Symbiosis
- D. Parasitism

**10) What family is rubella virus?!**

Togaviridae

**11) About Entamoeba histolytica, the true one :**

- a. Trophozoite has 4 nuclei
- b. R.H is cow
- c. Cyst has 1 nuclei
- d. Diagnosis stage are cyst and trophozoites XXX

**12) Causes cervical cancer :**

Papillomavirus type 16 & 18

**13) Trophozoite Entamoeba histolytica, the incorrect one :**

- a. Has clear ectoplasm
- b. Has granulae endoplasm
- c. May contain RBCs
- d. Ingested trophozoite can cause infection XXX

**14) correct about viruses**

DNA or RNA

**15) Drug suitable for treatment amobic dysentery**

- a. Amoxicillin
- b. Ceftriaxone
- c. Metronidazol xxx

**16) all of these Hermaphrodites termatodes except :**

schistosoma spp

**17) suitable site that can ulcer happen, by E.histolytica ?**

- a. Stomach
- b. Left kidney
- c. Doudenum
- d. Right liver lobe XXX

**18) one of these termatodes intestinal fluke:**

faxciolopsis buski

**19) Entamoeba coli, the true one :**

- a. Are Gram +ve
- b. Are Gram -ve
- c. Nonpathogenic XXX

**20) Penicillin – cell wall**

**21) Negri body :** Found in cytoplasm of neuron

**22) Viropexis - penetration**

**23) Liver masses from sheep :**

Echinococcus granulosus



**24)Wrong statment :**

staining takes 1 min

The most critical step is crystal violet XXX

Air dry is the first step

**25) Ritonavir .. HIV protease inhibitor**

**26)incorrect regarding nematodes:**

1)tissue nematodes – oviparous XXX

2) loa loa - eye worm

**27)in any stage the bacterial growth rate is greatest**

lag phase

log phase xxx

stationary phase

**28)Correct:**

Soap and water better than alcohol rub

**29)arrangement of curved bacteria :**

streptococci

tetrad

diplococcus

vibrio xxx

**30)One is correct :**

Eating food in laboratory is not permitted

**31)Trasmitted by blood except :**

HIV-1

HIV-2

Hepatitis B

Hepatitis C

H1N1 influenza XXX

**32)HIV has the capability of infecting dogs :**

Phenotypic mixing

**33) penicillin is discovered by :**

fleming XXX

lister

koch

pasteur

**34) Approx cell density in 0.5 McFarland standard  
(1\*v10\*8 CFU/ml)**

1.5

**35) Sneezing could cause all of the following except :**

Whooping cough  
Diphtheria  
Influenza  
TB  
Hepatitis B XXX

**36) incorrect About mycobacterium:**

Strict aerobes  
Grows slowly  
Mycolic acids  
Gram negative irregular bacilli xxx  
Virulence factors prevent destruction by lysosomes or macrophage

**37) HHV-8 inhibits p53 & Rb oncoprotein :**

Latency associated nuclear antigen

**38) Which one of the following is TRUE regarding temperate viruses? Temperate viruses:**

- A. Undergo both productive and non-productive infections and only establish latent infections
- B. Lead to a productive infection called lytic infection
- C. Undergo both productive and non-productive infections and can establish both latent and lytic infections
- D. Enter the cells and persist indefinitely with no virus production, called non-productive responses
- E. Only establish latent infections

**39) Produce anti oxidases to counter products of macrophage oxidative burst :**

Leishmania

**40) Resistant :**

Cell membrane  
Cytoplasm  
Plasmid XXX

**41) Progressive multifocal leukoencephalopathy is caused by?**

JC virus

**42) antibiotic given when your immunity can kill bacteria**

chloramphenicol  
tetracycline  
Bactercin XXX  
Trimethoprim  
Clindamycin

**43) 2 bacteria, GC content for the first one 70% .. the second one GC content 30% .. one of the following is the most accurate :**

The 2 bacteria are not related

**44) Wrong :** Mucus plug egg - pin worm

**45) Oncoproteins in kaposi sarcoma bind to p53 -LANA1**

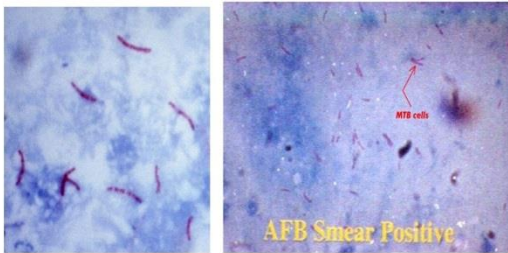
**46) determines the host range & cell tropism - glycoprotein**



- 47) **Positive result in complement fixation**-No lysis of RBC & settle into a pellet  
 48) **Continuous cells layer** -Hela  
 49) **Wrong:** Hcl with sputum to dissolve mucus  
 50) **Fasciolopsis habitat** -small intestine  
 51) **Miricardium** -Hatches from egg then swims to look for the snail as in intermediate host  
 52) **Treatment of entamoeba histolytica** -metronidazole  
 53) **Definitive host** -mature adult stage or sexual reproduction  
 54) **Attachments** -pilli  
 55) **Parasites** - Eukaryotic

56) **Counter stain :**

Methylene blue



TB bacteria

57) **In Mac konkey agar :**

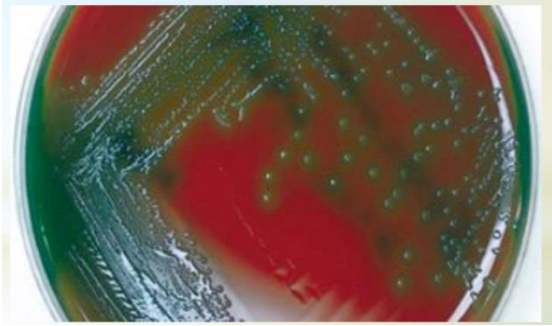
E.coli .. neutral red used



58) **Salmonella in SSA agar :**



59) Alpha hemolysis converts hemoglobin to methoglobin



60) Schistosoma



61) Necator americana



62) Strongliodes



**63)One incorrect about E test:**

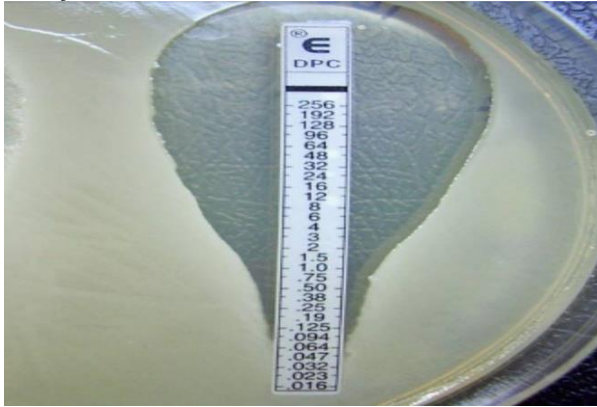
Plastic strip with predefined gradient of one AB

One strip per AB

Short shelf like

Storage at -10 C XXX

Easy to use



**64)Gene cassettes – trypanosome**





# MicroBiology Archive

Final - ٢٩٦



Done By:

Raghad Abu Khalaf

{ بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ }

1- The host in which non sexual reproduction take place:

- A- Intermediate host
- B- Definitive host
- C- Reservoir host
- D- Asymptotic host
- E- Primary host

Answer: A

2- The type of parasite that use pinocytosis:

- A- Ciliates
- B- Some flagellates
- C- Amoebae
- D- Sporozoa
- E- Coccidia

Answer: D

3- Organism that not cause any disease:

Answer: Coprozoic

4- Parasite found in other host different from its normal host:

Answer : Accidental

5- The infective stage of malaria:

- A- Sporozoites
- B- Merozoite
- C- Schizont
- D- Trophozoite

Answer: A

6- All the following are true about diagnosis of fungi, except:

- A- Culture the yeast in 10 C
- B- Culture the mold in 20 C

C- KOH

D- Gram stain

Answer: A

7- All of the following are true about fungi, except:

A- Have cell wall consists of chitin

B- Their cell membrane contain cholesterol

Answer: B

8- One of the following is example of fungi:

Answer: Mushroom

9- The specimen can be preserved in formalin:

A- 10%

B- 20%

Answer: A

10- All the following are true about sputum examination, except:

A- Purulent

B- Bloody

C- Add on sputum sample equal volume of NaOH

D- Add on sputum sample equal volume of NaCl

Answer: D

11- In stool technique for counting number of egg 53, how many egg in one gram of stool:

A- 5300

B- 10600

C- .25

D- 4

Answer: A

12- Regarding concentration method, the flotation of egg and cysts use solution of gravity:

A- High

B- Moderate

C- Low

Answer: A

13- Hemagglutinin is the receptor for:

A- COVID-19

B- HIV

C- Influenza virus

Answer: C

14- Viropexis:

A- Release virus with plasma membrane

B- Endocytosis

Answer: B

15- Release the viral content:

A- Uncoating

B- Assembly

C- Replication

D- Penetration

Answer: A

16- The correct order about viral life cycle:

A- Attachment-Uncoating-Penetration-Biosynthesis-Assembly-Release

B- Penetration- Biosynthesis- Assembly- Uncoating-Attachment-Release

C- Attachment -Penetration -Uncoating – Biosynthesis- Assembly-Release

D- Release-Attachment-Uncoating-Biosynthesis-Assembly-Penetration

Answer: C

17- The type of Nucleic Acid that go directly to ribosome in virus:

A- -ssRNA

B- DsRNA

C- DsDNA

D- +ssRNA

Answer: D

18- The process by which get dsDNA from ssRNA:

A- Replicate

B- Reverse transcriptase

C- Chemokines

Answer: B

19- The enzyme that used in – ssRNA:

A- DNA dependent DNA polymerase

B- DNA independent DNA polymerase

C- RNA dependent RNA polymerase

D- RNA independent RNA polymerase

Answer: C

20 - Neocapsid:

A- Capsid + genome

B- Capsid

Answer: A

21- The directly surrounding of Nucleic Acid in virus:

A- Capsid

B- Lipid envelope

C- All of above

Answer: A

22- Viral virulence depends in:

A- Dose

B- Virus strain

C- Host factor

D- Inoculation rote

E- All of above

Answer: E

**23- Virus that enter in skin penetration:**

- A- Rotavirus
- B- Adenovirus
- C- Influenza
- D- Rabies
- E- HIV

**Answer: D**

**24- Virus associated with negri bodies:**

**Answer: Rabies**

**25- All of the following are true about acute infection, except:**

- A- The patient are asymptomatic
- B- Develops suddenly
- C- Continues for a long time

**Answer: A**

**26- False regarding hepatitis B:**

- A- Its persistent chronic infection
- B- Mild or no clinical symptoms may be evident
- C- Cell continues to survive despite viral infection
- D- Replication at high rate with positive serological test
- E- People may able to transmit germ to other

**Answer: D**

**27- False regarding HSV-1:**

- A- Virus may lays dormant in extrachromosomal circular DNA
- B- PCR always Positive

**Answer: B**

**28- In Eliesa we add:**

**Answer: Enzyme**

**28- HIV is example on:**

- A- Slow chronic infection
- B- Slow persistent infection
- C- Chronic persistent infection
- D- Latent persistent infection
- E- Acute infection

**Answer: B**

**30- In sandwich Elisa the well coated with:**

- A- Antibody
- B- Antigen
- C- Antibody & Antigen

**Answer: A**

**31- The positive results in complement fixation test:**

- A- No hemolysis of RBC with blood points
- B- Hemolysis of RBC

**Answer: A**

**32- True about Electron microscopy:**

- A- Expensive equipment
- B- Expensive maintenance
- C- Require experience
- D- Large room
- E- All of above

**Answer: E**

**33- The magnification used for viruses:**

- A- 60000
- B- 1200
- C- 2000

**Answer: A**

34 - Virus has haemagglutinin protein is surface :

A- Influenza

B- HIV

C- HSV

Answer: A

35- All the following true regarding oncovirus, except:

A- Rb is tumor-suppressor gene

B- Insertion of viral gene within tumor suppressor gene lead to its inactivation

C- Insertion of viral gene close to proto-oncogene lead to its activation

E- Epstein-Barr virus cause Kaposi sarcoma

Answer:

36- All the following are true about trophozoite, except:

A- Make budding

B- Has pseudopodia

C- Has one nucleus

Answer: A

37- Patient came to the hospital with the following symptoms: diarrhea, abdominal pain and vomiting, you suspect that its Amoebae, choose the wrong

A- Found cysts with 4 nucleus in stool

B- Infection stage because of seen of trophozote in stool

Answer: A

38- The cause of flask shape ulcer:

Answer: E. histolytica

39-All the following are complications of E. histolytica, except:

A- Liver

B- Skin

C- Lung

D- Brain

E- Urinary tract

Answer: E



40 - Parasite found in liver:

A- Fasciola gignatica

B- Fasciolopsis buski

Answer: A

41- Segmentina is used for:

A- Fasciola gignatica

B- Fasciolopsis buski

C- Diphyllbothrium latum

Answer: B

42- The parasite that infected by ingestion of cyst larvae:

A- Ancylostoma Duodenale

B- Necator Americanus

C- Strongyloides Stercoralis

D- Trichinella Spiralis

Answer: D

43- The infective stage of fasciola gignatica:

A- Cercira

B- Encycted metacercaria

C- Sporocyst

D- Redia

E- Miracidium

Answer: B

44- One of the following come from undercooked pigs

A- Fasciolopsis Buski

B- Fasciola Gignatica

C- Loa Loa

Answer: A

45- Suolex is:

A- Head

B- Neck

Answer: A

46- All the following are true, except:

Answer: Cestodes have elementary tract

47- Cyclop is related to the life cycle of:

- A- Diphyllbothrium latum
- B- Tenia solium
- C- Tenia segenata

Answer: A

48- Pernicious anemia associated with

- A- Diphyllbothrium latum
- B- Tenia solium
- C- Tenia segenata

Answer: A

49- Gravid segment detach in group

- A- Tenia solium
- B- Tenia segenata
- C- Diphyllbothrium latum

Answer: A

50- The parasite in which man be intermediate host:

- A- Diphyllbothrium latum
- B- Tenia solium
- C- Tenia segenata

Answer: B

51- Cysticercosis occurs in:

- A- Diphyllbothrium latum
- B- Tenia solium
- C- Tenia segenata

Answer: B

52- Infection occurs through cell penetration:

- A- Enterobus

**B- Necator Americanus**

**Answer: B**

**53- Main important step in gram staining:**

**Answer: Crystal / acetone not sure**

**54- The parasite that passes through the human intestine without causing any symptoms:**

**Answer: Coprozoic parasite**

**55- The genome that the host cell uses it directly as mRNA translation is:**

**A- + ssRNA**

**B- -ssRNA**

**C- dsRNA**

**D- dsDNA**

**Answer: A**

**56- The infection stage of Plasmodium:**

**A- Schizont**

**B- Trophozite**

**C- Sporozoite**

**Answer: C**

**57- Female Culex mosquitoes is intermediate host for:**

**A- Wuchereria bancrofti**

**B- Brugia malayi**

**C- Loa loa**

**D- Onchocerca volvulus**

**Answer: A**

**58- The parasite that found in skin nodules is:**

**A- Wuchereria bancrofti**

**B- Brugia malayi**

C- Loa loa

D- Onchocerca volvulus

Answer: D

59- The Lugol's iodine is used to:

A- Glycogen vacuole in cyst

B- Sputum

Answer: A

60- The incorrect about sputum:

A- Add on a sputum sample equal volume of NaOH to dissolve the mucus.

B- Centrifuge at 200xg for 5 minutes, then examine the sediment

C- Add on a sputum sample equal volume of NaCl to dissolve the mucus

Answer: C

61- Main important step in gram staining:

Answer: Crystal violet & Gram iodine

62- Symbiotic:

Answer: Bacteria grow in partnership with other living organism

63- Ingestion eggs:

Answer: Ascaris

64- Eye worm:

Answer: Loa loa

65- Body temperature for growth of yeast:

A- 10C

B- 37C

Answer: B

66- Acid fast stain (Counter stain):

Answer: Methylene blue

67- Parasite that feed by pinocytosis :

A- Ciliates

B- Some flagellates

C- Amoeba

D- Sporozoa

Answer: D

68- All of the following are true about oncovirus, except:

A- RNA herpes virus

B- Insertion of viral gene close to the protooncogene leads to activation

C- Insertion of viral gene within the tumor suppressor gene leads to inactivation

Answer: A

69- In the complement fixation test:

Answer: Positive if no hemolysis

70- Parasite cause Pernicious anaemia :

Answer: Dipyllobothrium

71- One is INCORRECT about HBV:

Answer: High rate of replication

72- Virulence depends on:

A- Dose

B- Genetics

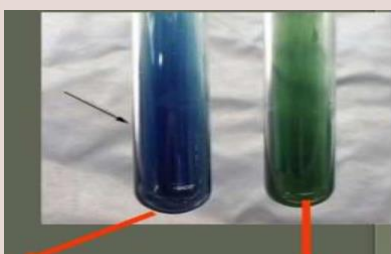
C- Inoculation route (portal of entry)

D- Host factors

E- All of the above

Answer: E

73- The name of the test below:



A- Proskauer Test

B- Citrate Test

C- Urease Test

D- Sugar fermentation Test

Answer: B

74- The name of the tapeworm below:



A- Taenia Solium

B- Taenia Saginata

C- Diphyllbothrium latum

Answer: B

75- The name of the Egg below is:



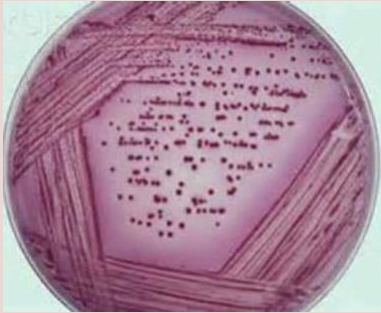
A- Coracidium

B- Diphyllbothrium latum

C- T. Saginata

Answer: B

76) Which of the following is true regarding the picture:



A- Gram negative bacilli

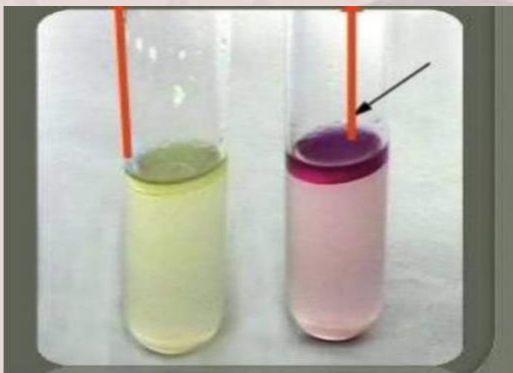
B- Gram positive bacilli

C- Gram negative cocci

D- Gram positive cocci

Answer: A

77) The pink tube is considered as:



A- Positive test, Klebsiella

B- Negative test, Klebsiella

C- Positive test, E.coli

D- Negative test, E.coli

Answer: C

78) The egg below is related to:



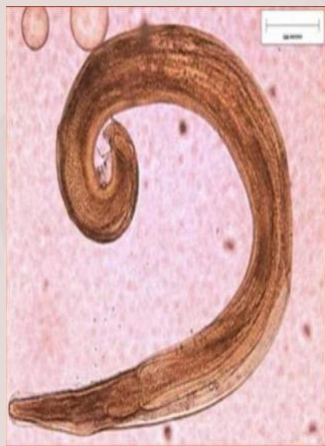
A- *Capillaria philippinensis*

B- *T. Solium*

C- *Enterobius vermicularis*

Answer: C

79- The true feature according to the photo blow that it is:



A- *Enterobius vermicularis* male

B- Hasnot esophagus

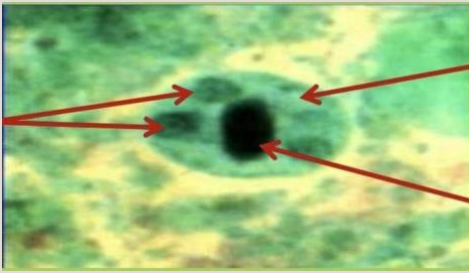
C- Hasnot lips

D- *Enterobius vermicularis* Female

Answer: A

80- All of the following are true according to the photo bellow, except

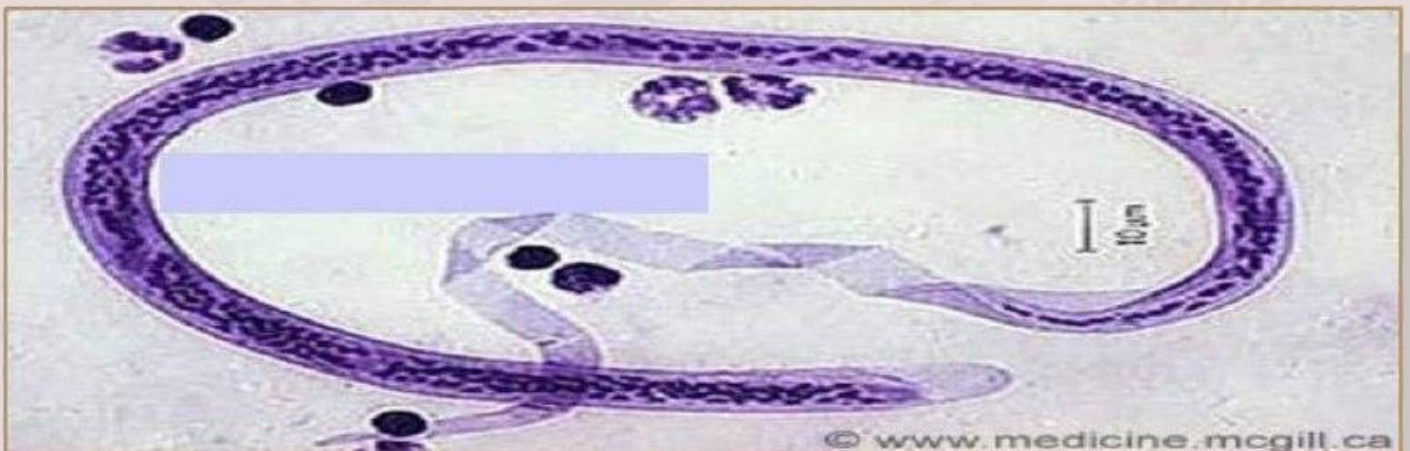




- A- Contain 4 nuclei
- B- One chromatoid body
- C- Rounded with thin cyst wall
- D- Entamoeba histolytica mature cyst
- E- Glycogen vacuole

Answer: C

81-



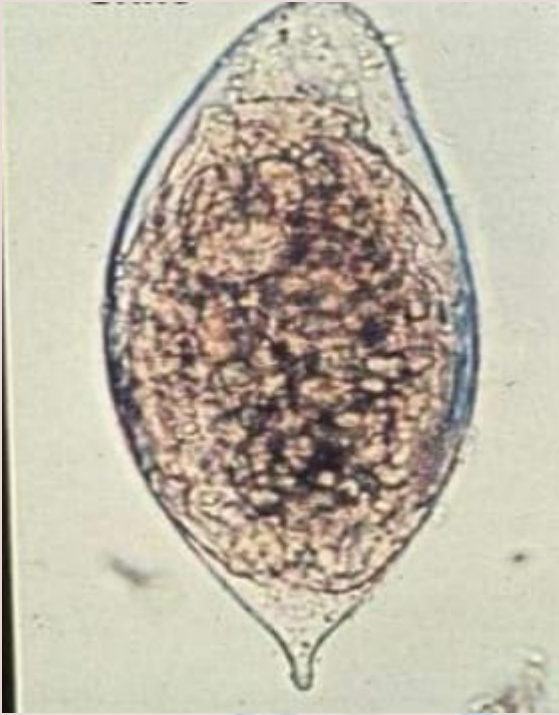
Answer: Wuchereria Bancrofti

82-



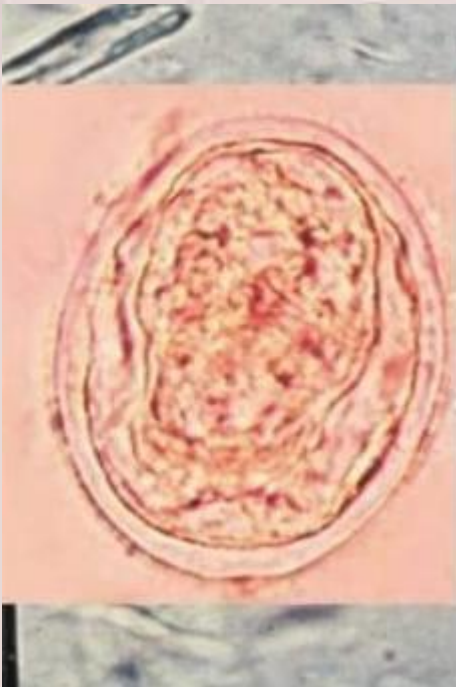
Answer: *S.mansoni* , Stool

83-



Answer: *S.haematobium* , Urine

84-



Answer: *S.japonicum* , Stool

85-



Answer: T.spiralis

86-



Answer: Trichuris trichiura (The whipworm)

الحمد لله، ما انتهى دربٌ ولا خُتِمَ جهدٌ ولا تمَّ سعيٌّ إلا بفضلِهِ وكرمه .

تحية إكبار وإجلال لمن وصل معنا إلى هنا!

في ظل زنقاتك تذكر: "ما على الإنسان سوى السعي"

يسعى الإنسان ولا ينتظر النتيجة؛ لأنها بأمر الله - عز وجل - ، الإنسان مأجور على سعيه وخطواته ومجاهدته وهذا ما يُريده،

الأجر لا النتيجة

فَوْضَ أمورك لله..

ثق بأنه - عز وجل - يقدر لك الخير في كل شيء

{.وَأَنْ لَيْسَ لِلْإِنْسَانِ إِلَّا مَا سَعَى، وَأَنَّ سَعْيَهُ سَوْفَ يُرَى، ثُمَّ يُجْزَاهُ الْجَزَاءَ الْأَوْفَى}

لجنة الطب والجراحة تتمنى لكم كل التوفيق

لا تنسوننا من صالح دعائكم .



# Athar

## Microbiology Final

Done By:

muneer ibrahim

Designed By :

Raneem Dmour



1.All of the following is transmitted through inhalation except:

- A. Bordetella
- B. Entamoeba Histolytica
- C. C. E.V

ANSWER: c

2.The most important step in gram staining is:

- A. Fixation
- B. Iodine treatment
- C. Decolorization
- D. Counter stain

ANSWER: c

3.Why does the SS agar produce black colonies:

- A. Ferrous sulfide
- B. Ferric
- C. H<sub>2</sub>S
- D. Sodium thiosulfate

ANSWER: d

4.Brucella is considered:

- A. BSL1
- B. BSL2
- C. BSL3
- D. BSL4

ANSWER: c

5.Gauze soiled by the urine of a patient being treated with chemotherapy. What color is the waste bag?

- A. Blue
- B. Red
- C. Black
- D. Yellow

ANSWER: a

6.One of the following is wrong about Indole Test:

- A. Some microorganisms can metabolize tryptophan
- B. Kovac's reagent
- C. Bright pink ring
- D. NH<sub>4</sub>

ANSWER: d



7. How many days is required for a patient with diarrhea, after being tested positive *C. difficile*, to be noninfectious?

- A. 24 hrs
- B. 48 hrs
- C. 72 hrs
- D. 1 week

ANSWER: b

8. Incubation period of chicken pox is:

- A. 1 week
- B. 3 days
- C. 25-30 days
- D. 1-2 weeks
- E. 10-21 days

ANSWER: e

9. HIV pathogenesis is considered:

- A. Acute infection
- B. Resistant chronic infection
- C. Latent resistant infection
- D. Slow persistent infection

ANSWER: c

10. What is the bacteria that may cause antibiotic associated colitis:

- A. *S. aureus*
- B. *C. botulinum*
- C. *Shigella*
- D. *Brucella*
- E. *C. difficile*

ANSWER: e

11. The glycan receptor sit on the surface our cells which helps what virus?

- A. Influenza virus
- B. HIV
- C. Covid 19

ANSWER: a



12.The viropex is:

A. Receptor mediated endocytosis

13.Which of the following may cause B12 deficiency:

A. Diphyllobthrium

B. EV

ANSWER: a

14.NIH swap:

A. Teania Saginata and Enterobious

B. Teania Saginata

C. Enterobious

ANSWER: a

14.Geographical distribution of parasites depend on all except

A. Host habitat

B. Host occupation

C. Atmospheric pressure

D. Morphology

ANSWER: d

16.All of the following are the direct effects of the parasite on the host except:

A. Impairing nourishment

B. Tissue damage

C. toxic effect

D. immunological response

E. secondary bacterial infection

ANSWER: d

17.which of the following cause negri bodies:

A. Rabies

B. Chickenpox

C. Smallpox

ANSWER: a

18.What is the complete host:

A. Host which harbours the adult stage

B. The host which harbours the larval stage

C. The host that acts as a source of infection to man

D. The host which acts as both defeintive and intermediate host

ANSWER: d





19.The source of SS agar:

- A. Sodium thiosulfate
- B. Ferrous sulfide

ANSWER: a

20.Which of the following is considered a strict aerobe bacteria:

- A. Mycobacteria
- B. Pseudomonas
- C. S.aureus
- D. Mycobacteria and Pseudomonas

ANSWER: d

21.The treatment of fascioliasis:

- A. Metronidazole
- B. Vancomycin
- C. Streptomycin
- D. Triclabendazole

ANSWER: d



