

1) 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

Ribosomes are the factory of \_\_\_ synthesis? Select one:

a.Protein

b.Plasmid

c.Sugar

d.Lipid

e.DNA

3)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

5)bacterial flagella surrounding all the body is called?

a.Penitrichous

b.Amphitrichous

c.Lophotrichous

d.Monotrichous

e.Ditrichous

6) 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

7) 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.

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

Select one:

a. Bare above elbow.

**b. Share thermometers between patients**

C. No coats.

d. Cover open wounds with occlusive adhesive

e. Hand washing

9) )Which of the followings has a spiral shape?

Select one:

a.Neissenia

**b.Treponema**

c.Chlamydia

d.E.coli

e.Yersinia

11)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

12) 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.

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

Select one:

a.Proteus

b.Bordetella pertussis

C.Neisseria meningitides

**d.Clostridium tetani.**

e .E. coli

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

B

Select one:

a. Gown

b. Surgical mask

c. hand hygiene.

d. Gloves

e. Goggles

15) 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 .

17) 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 .

18) Which of the following 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

19) 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.

20) 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

21) Most of pathogenic bacteria can live in the following temperature range?

Select one:

a. Mesophile

b. Psychrophile.

c. Thermophile.

d. Capnophiles.

e.Hyperthermophile.

22) 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**

23) Aerobic bacteria are?

Select one :

a.Only grow anaerobically

b.Only grow in the presence of  $CO_2$

c.Usually anaerobic but can grow with  $CO_2$ .

d.Ordinarily aerobic but can grow in absence of  $O_2$  .

**e.Only grow aerobically .**

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

Select one:

**a.Plasmid**

b.Pilus

c.Capsule

d.Plasma Membrane

e.Cell wall

25) 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.

26) 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.

27) Which of the following is Gram negative diplococcus?

Select one:

**a. N. gonorrhoeae**

b. Staphylococcus aureus

c. H. pylori

d. S. pneumoniae

e. Proteus

28) A 3-year-old child was seen by the pediatrician. On examination, suspected of having meningitis. The CSF Gram staining showed Gram-negative coccobacilli. Which of the following do you expect the causative agent?

Select one :

a. N. meningitidis

**b. H. influenzae**

c. E. Coli

d. N. gonorrhoeae

e. Proteus

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

Select one :

a. Iodine.

b. Tyndallisation.

c. Inspissations.

**d. Ethylene oxide.**

e. Filtration .

30) 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.

31) 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.

32) 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...**

33) 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**

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

Select one:

a. E. coli.

**b. measles**

c. hepatitis C.

d. Cholera

e. Hepatitis A

35) 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.

36) 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

37) 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

38) 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

39) 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

40) 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.

41) 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

42) 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.**

43) 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.

44) MacConkey agar is considered a?

Select one :

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

**e.Differential media.**

45) 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.

46) 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**

47) 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.

48) Which of the following is CORRECT?

Select one:

a. Neisseria meningitidis has no capsule

b. Helicobacter pylori 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**

49) 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.

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

Select one:

**a.Oxolinic acid.**

b.Trimethoprim.

c.Chloramphenicol.

d.Tetracycline.

e.Cephalosporin.

51) 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

52) Single-stranded DNA is the genetic material of?

Select one:

a.Caliciviruses

b.Flaviviruses.

C.Papillomaviruses.

**d.Parvoviruses.**

e. Herpesviruses.

53) 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.

54) 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

55) 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

56) 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

57) 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