

True questions:

Question N1 Never remove chemicals, specimens, or other equipment from the laboratory.

Answer: 1

Point: 0.25

Question N2 Long hair must be secured to the back of your head.

Answer: 1

Point: 0.25

Question N3 Long hair, hanging jewelry, and loose clothing can be dangerous in a lab.

Answer: 1

Point: 0.25

Question N4 The space between the cytoplasmic membrane and the outer membrane is called the periplasm.

Answer: 1

Point: 0.25

Question N5 Serial dilution is a process through which the concentration of an organism, bacteria in this example, is systematically reduced through successive resuspension in fixed volumes of liquid diluent.

Answer: 1

Point: 0.25

Question N6 Desiccation, filtration, high pressure, radiation are examples of dry heat.

Answer: 0 True

Point: 0

Question N7 Disinfectants: chemical agents applied to inanimate objects. More harsh. Some may destroy endospores (steriliants or sporocides) (ex – ethylene oxide)

Answer: 1

Point: 0.25

Question N8 The majority of bacterial species on Earth have not been successfully cultivated.

Answer: ~~0~~ True

Point: 0

Question N9 Currently, no members of Archaea have been linked to human disease.

Answer: ~~0~~ True

Point: 0

Question N10 Biofilms provide pathogens with an adhesion mechanism and aid in resistance to antimicrobial agents.

Answer: 1

Point: 0.25

Question N11 The M protein enhances the virulence of Streptococcus by preventing phagocytosis.

Answer: 1

Point: 0.25

Question N12 The mode of action of chloramphenicol is to inhibit protein synthesis.

Answer: 1

Point: 0.25

Question N13 You can use mouse inoculation to detect tetanus in animals.

Answer: 1

Point: 0.25

Question N14 Botulinum toxin works by preventing release of acetylcholine by synaptic vesicles.

Answer: 1

Point: 0.25

Question N15 Bacitracin test is used for presumptive identification of group A streptococci

Answer: 1

Point: 0.25

Question N16 The urease test is used to differentiate Escherichia coli and Proteus vulgaris~nbsp;

Answer: 1

Point: 0.25

Question N17 Pseudomonas aeruginosa can infect plants as well as humans?

Answer: 1

Point: 0.25

Question N18 P. aeruginosa is motile by single polar flagella

Answer: 1

Point: 0.25

Question N19 One of the characteristic symptoms of brucellosis is rise of a temperature up to 40°C each evening

Answer: 1

Point: 0.25

Question N20 Anyone in charge of premises can be held liable for not undertaking a Legionella risk assessment.

Answer: 1

Point: 0.25

Question N21 C. trachomatis exists in two forms, an extracellular infectious elementary body (EB) and an intracellular non-infectious reticulate body (RB)

Answer: 1

Point: 0.25

Question N22 Keep hands and other objects away from your face, nose, eyes, ears, and mouth. The application of cosmetics in the laboratory is prohibited.

Answer: 1

Point: 0.25

Question N23 Trypticase soy broth or TSB is a liquid media

Answer: 1

Point: 0.25

Question N24 The microbiological medium exact chemical composition of which is unknown is Complex medium

Answer: 1

Point: 0.25

Question N25 DISINFECTION - using physical or chemical agents to destroy microbes or their products, on inert objects or nonliving materials.

Answer: 1

Point: 0.25

Question N26 Chemical agents used to destroy or inhibit pathogenic microbes on living tissue are antiseptics.

Answer: 1

Point: 0.25

Question N27 The birth of modern chemotherapy is credited to the efforts of Paul Ehrlich

Answer: 1

Point: 0.25

Question N28 More than half of our antibiotics are produced by species of Streptomyces.

Answer: 1

Point: 0.25

Question N29 Clostridium difficile causes antibiotic-associated diarrhea, antibiotic associated pseudomembrane colitis

Answer: 1

Point: 0.25

Question N30 ~beta;-hemolysis, catalase negative, Bacitracin susceptible ~rarr; Streptococcus pyogenes

Answer: 1

Point: 0.25

Question N31 Hektoen enteric agar and Salmonella-Shigella agar, are Selective media for the isolation of Shigella.

Answer: 1

Point: 0.25

Question N32 EHEC secretes a Shiga-like toxin and EPEC does not.

Answer: 1

Point: 0.25

Question N33 People with reduced immunity, and malnourishment, ~nbsp; with blood group O are at a higher risk for developing cholera.

Answer: 1

Point: 0.25

Question N34 Pasteurella multocida is a gram-negative, fermentative pleomorphic coccobacilli, penicillin-sensitive of the family Pasteurellaceae.

Answer: 1

Point: 0.25

Question N35 P. multocida is the most common cause of wound infections after dog or cat bites.

Answer: 1

Point: 0.25

Question N36 Ehrlichia chaffeensis is the cause of human monocytic ehrlichiosis

Answer: 1

Point: 0.25

Question N37 Leptospirosis is a zoonotic disease usually associated with occupation exposure to animals or working with rats

Answer: 1

Point: 0.25

Question N38 Spontaneous generation theory means that living things come from nonliving things

Answer: 1

Point: 0.25

Question N39 The theory of biogenesis refers to the development of life forms from preexisting life forms.

Answer: 1

Point: 0.25

Question N40 The main constituent of a Gram positive cell wall is Peptidoglycan.

Answer: 1

Point: 0.25

Question N41 The bacterial cell wall may be a potential target for antibiotics.

Answer: 1

Point: 0.25

Question N42 Growth are referring to the number of cells, not the size.

Answer: 1

Point: 0.25

Question N43 Tolerance referring to the survival of bacteria under condition in which they cannot grow.

Answer: 1

Point: 0.25

Question N44 Selective media contain agents that inhibit the growth of certain bacteria while permitting the growth of other.

Answer: 1

Point: 0.25

Question N45 Agents which kills bacteria are called bacteriocidal and agents which only inhibited its growth are called bacteriostatic.

Answer: 1

Point: 0.25

Question N46 Protein synthesis in eukaryotes is similar to the process in prokaryotes in that both eukaryotes and prokaryotes use codons to determine polypeptide sequences.

Answer: 1

Point: 0.25

Question N47 An antibiotic that attacks the LPS layer would be expected to have a narrow spectrum of activity.

Answer: 1

Point: 0.25

Question N48 Endospores of *C. botulinum*, as a cause of infant botulism, have been recovered from honey

Answer: 1

Point: 0.25

Question N49 Shiga-type toxin ~ndash; also called the verotoxin -produced by enterohemorrhagic strains of *E. coli* (EHEC)~

Answer: 1

Point: 0.25

Question N50 ~ Most *E. coli* express Pili, which play a role in virulence as mediators of attachment to human epithelial cells~

Answer: 1

Point: 0.25

Question N51 Tuberculosis (TB) is an infectious disease caused by a bacterium that spreads through the air, usually through coughing.

Answer: 1

Point: 0.25

Question N52 The outer membrane contains porins.

Answer: 1

Question N53 Protozoan and helminthic diseases are difficult to treat because their cells are structurally and functionally similar to human cells.

Answer: 1

Question N54 There are three types of anthrax namely cutaneous anthrax, intestinal anthrax, and respiratory anthrax.

Answer: 1

Question N55 β -hemolysis, catalase negative, Bacitracin susceptible → *Streptococcus pyogenes*

Answer: 1

Question N56 Shiga-type toxin – also called the verotoxin - produced by enterohemorrhagic strains of *E. coli* (EHEC)

Answer: 1

Question N57 Most *E. coli* express pili, which play a role in virulence as mediators of attachment to human epithelial cells

Answer: 1

Question N58 Cholera is spread through intake of contaminated water or food in places that lack adequate sanitation facilities.

Answer: 1

Question N59 Nearly 80% of cholera cases can be treated with oral rehydration solution alone. Intravenous fluids are required for people with severe dehydration.

Answer: 1

Question N60 Whooping cough is treated by macrolides, for example erythromycin.

Answer: 1

Question N61 *Yersinia pestis* causes the disease plague, which takes three main forms: pneumonic, septicemic, and bubonic.

Answer: 1

Question N62 *Treponemas* are so thin that they can be difficult to see on darkfield microscopy.

Answer: 1

Question N63 *Leptospire*s are aerobic and can be grown on artificial media.

Answer: 1

Question N64 Francesco Redi demonstrated that maggots appeared only in decaying meat that had been exposed to flies –this was experiments in support of the biogenesis theory.

Answer: 1

Question N65 The fermentation is conversion of sugar to alcohol to make wine and beer, that is done by yeasts in the absence of air.

Answer: 1

Point: 0.25

Question N66 *Psychrophiles* are a group of microorganisms with the ability to grow and reproduce under low temperatures ranging from -20 to 10~deg;C.

Answer: 1

Point: 0.25

Question N67 Generation time is the time required for a microbial population to double in number

Answer: 1

Point: 0.25

Question N68 The Clostridiales – the endospore-producing rod-shaped obligate anaerobs, belong to Gram –positive bacteria with the low G+C content.

Answer: 1

Point: 0.25

Question N69 In urinary tract infections gender can be considered a viable predisposing factor

Answer: 1

Point: 0.25

Question N70 The spread of disease agents via contaminated water is an example of vehicle transmission

Answer: 1

Point: 0.25

Question N71 Community-acquired MRSA is typically more virulent than healthcare associated MRSA.

Answer: 1

Point: 0.25

Question N72 Antiviral drugs target viral processes that occur during viral infection.

Answer: 1

Point: 0.25

Question N73 Forage poisoning is due to botulinim toxin C.

Answer: 1

Point: 0.25

Question N74 Both Tetanus and Botulism exotoxins can be formed into toxoids.

Answer: 1

Question N75 Latex Agglutination test is modern diagnostic method for identification of

S. aureus.

Answer: 1

Question N76 Most strains of E coli ferment lactose rapidly and produce indole.

Answer: 1

Point: 0.25

Question N77 E.coli turn red/ pink on MacConkey(MAC) agar, giving a positive reaction.

Answer: 1

Point: 0.25

Question N78 Rickettsia organisms can grow in yolk sacs of embryonated eggs as well as several cell lines

Answer: 1

Point: 0.25

Question N79 Antiviral drugs do not affect eukaryotic cells.

Answer: (1)

Point: 0.25

Question N80 Bacterial cell-to-cell contact is not required for transduction to occur.

Answer: 1

Point: 0.25

Question N81 Inapparent or subclinical infections can be detected only by demonstrating a rise in antibody titer or by isolating the organism.

Answer: (1)

Point: 0.25

Question N82 Botulism is an intoxication resulting from the ingestion of food in which C.botulinum has produced toxin.

Answer: 1

Point: 0.25

Question N83 Tetanospasmin is responsible for clinical manifestations of tetanus.

Answer: 1

Point: 0.25

Question N84 The reagent used to distinguish staphylococci from streptococci is Hydrogen peroxide~nbsp;

Answer: 1

Point: 0.25

Question N85 Streptococcus pyogenes can be differentiated from other haemolytic Streptococci on the basis of Bacitracin sensitivity.

Answer: 1

Point: 0.25

Question N86 The most prominent symptom of cholera is profuse, watery diarrhea, which can lead to dehydration and even death.

Answer: 1

Point: 0.25

Question N87 B. pertussis infects its host by colonizing lung epithelial cells.

Answer: 1

Point: 0.25

False questions:

Question N1 The flagella is a structure which allows substances in and out of the bacteria.

Answer: ~~1~~ False

Point: 0

Question N2 A plasmid is contained within the bacterial chromosome.

Answer: ~~1~~ False

Point: 0

Question N3 Blood agar is unable to cultivate the fastidious microorganisms

Answer: 0

Point: 0.25

Question N4 Mixed Cultures are suitable for the study of their cultural, morphological and biochemical properties.

Answer: 0

Point: 0.25

Question N5 In general, the LD50 for exotoxins is much greater than the LD50 for endotoxins.

Answer: 0

Point: 0.25

Question N6 The majority of available antimicrobial agents are effective against protozoa.

Answer: 0

Point: 0.25

Question N7 Antifungal drugs do not affect eukaryotic cells

Answer: 0

Point: 0.25

Question N8 A mannitol salt agar is designed for the isolation of *Streptococcus* spp.

Answer: 0

Point: 0.25

Question N9 ~nbsp;facultative anaerobes, ferments manitol, catalase positive, cluster of spherically shaped cell, high salt tolerance, is- ~nbsp; *S.epidermidis*

Answer: 0

Point: 0.25

Question N10 In the Triple Sugar-Iron Agar Test yellow butt and red slant indicates no fermentation of glucose, fermentation lactose or sucrose

Answer: 0

Point: 0.25

Question N11 Massive human-to-human transmission of plague is usually result of unsanitary conditions

Answer: 0

Point: 0.25

Question N12 Only companies and organisations in specific sectors are required to undertake *Legionella* risk assessments.

Answer: 0

Point: 0.25

Question N13 **Rickettsia** Organisms are short, nonmotile, Gram positive rods.

Answer: 0

Point: 0.25

Question N14 **Laboratory coats** used in microbiological lab can be worn outside the laboratory.

Answer: 0

Point: 0.25

Question N15 **Pipets** are used to measure and dispense small amounts of liquids. You should draw the liquid into the pipet using your mouth.

Answer: 0

Point: 0.25

Question N16 **Size of bacteria** is best measured in nanometers.

Answer: 0

Point: 0.25

Question N17 **The limit of resolution of the Transmission Electron Microscope** is approximately 10,0 nm.

Answer: 0

Point: 0.25

Question N18 **The darkfield microscope** is best used for observing the surfaces of bacterial cells and viruses.

Answer: 0

Point: 0.25

Question N19 **A Culture Medium** containing a solidifying agent is called **Broth Medium**

Answer: 0

Point: 0.25

Question N20 Rickettsias differ from chlamydias in that rickettsias are intracellular parasites.

Answer: 0

Point: 0.25

Question N21 All gram-positive bacteria are classified as proteobacteria.

Answer: 0

Point: 0.25

Question N22 In A-B exotoxins, the A component binds to the host cell receptor so that the B component can enter the cell.

Answer: 0

Point: 0.25

Question N23 Most symptoms of endotoxins can be treated with administration of antiendotoxin antibodies.

Answer: 0

Point: 0.25

Question N24 Most of the available antimicrobial agents are effective against viruses.

Answer: 0

Point: 0.25

Question N25 Clostridium spp. cause disease by producing endotoxins

Answer: 0

Point: 0.25

Question N26 Catalase positive, coagulase negative, novobiocin susceptible, bacitracin resistant, no hemolysis â†’ Streptococcus agalactiae

Answer: 0

Point: 0.25

Question N27 Flies can not transmit cholera?

Answer: 0

Point: 0.25

Question N28 Most Mycobacteria grow best in 5-10% CO₂ and at 40-45 C.~nbsp;

Answer: 0

Point: 0.25

Question N29 Out of~nbsp; M. tuberculosis and M. bovis only~nbsp; M. tuberculosis~nbsp; can cause Tb

Answer: 0

Point: 0.25

Question N30 Two names of microorganisms – genus and a specific epithet(species) both are capitalized.

Answer: 0

Point: 0.25

Question N31 Ribosomes are found in viruses.

Answer: (0)

Point: 0.25

Question N32 Disinfectants are chemical substances that destroy or inhibit the growth of microorganisms in living tissues.

Answer: (0)

Point: 0.25

Question N33 PABA serves as the competitive inhibitor in the action of sulfanilamides.

Answer: (0)

Point: 0.25

Question N34 Undergrowth of fungi after antibiotic use is commonly referred to as a superinfection.

Answer: 0

Point: 0.25

Question N35 Lifelong immunity is conferred once an individual has had botulism and recovered

Answer: 0

Point: 0.25

Question N36 Mycobacterium tuberculosis causes Tuberculosis a contagious infection that only affects the lungs.

Answer: 0

Point: 0.25

Question N37 Borreliae are highly flexible and much more coiled than the Leptospire.

Answer: (0)

Point: 0.25

Question N38 Catalase positive, coagulase negative, novobiocin susceptible, bacitracin resistant, no hemolysis → Streptococcus agalactiae

Answer: 0

Point: 0.25

Question N39 It's Okay to pick up broken glass with your bare hands as long as the glass is placed in the trash.

Answer: 0

Question N40 Mixed Cultures are suitable for the study of their cultural, morphological and biochemical properties.

Answer: 0

Question N41 Media that make it easier to distinguish colonies of the desired organism from other colonies growing on the same plate is enrichment medium

Answer: (0 if the question is true or false choose false)

Question N42 Germ theory of disease—the idea, that infectious diseases are caused by microorganisms, or germs, was developed by Josef Lister.

Answer: (0)

Point: 0.25

Question N43 Immersion Oil is used to clean the lenses of a microscope.

Answer: (0)

Point: 0.25

Question N44 When first focusing in low power, bring the lens as close to the slide as possible.

Answer: 0

Point: 0.25

Question N45 Media can be either selective or differential, but they cannot be both.

Answer: (0)

Point: 0.25

Question N46 Freezing is the most widely used of the physical methods of microbial control

Answer: (0)

Point: 0.25

Question N47 Dry Heat is the most widely used of the physical methods of microbial control

Answer: (0)

Point: 0.25

Question N48 The phylum Actinobacteria is defined as a low G+C gram-positive bacteria.

Answer: (0)

Point: 0.25

Question N49 A disease acquired by many people in a given area in a relatively short period of time is called pandemic.

Answer: 0

Point: 0.25

Question N50 Phage therapy has been used in the past as an antiviral treatment.

Answer: (0)

Point: 0.25

Question N51 DNase test is used to differentiate *S.epidermidis* from *S.saprophyticus*

Answer: 0

Point: 0.25

Question N52 Coagulase test is modern diagnostic method for identification of *S. aureus*.

Answer: (0)

Point: 0.25

Question N53 Interferon-gamma release assays (e.g., TB Gold) and Mantoux skin test can distinguish between latent infection and active (pulmonary or extrapulmonary) disease. True or False?

Answer: (0)

Point: 0.25

Question N54 Hot tubs are a low risk environment for *Legionella* growth.

Answer: 0

Point: 0.25

Question N55 *Coxiella burnetti* is the causative agent of Rocky Mountain spotted fever.

Answer: (0)

Point: 0.25

Question N56 Radiation is the most widely used of the physical methods of microbial control

Answer: 0

Point: 0.25

Question N57 Bacteria typically contain multiple chromosomes.

Answer: 0

Point: 0.25

Question N58 Foodborne transmission: pathogens are spread by water contaminated with untreated or poorly treated sewage (cholera, shigellosis, and leptospirosis). ~nbsp; ~nbsp;

Answer: (0)

Point: 0.25

Question N59 Growth of Pseudomonas aeruginosa always requires the presence of oxygen?

Answer: 0

Point: 0.25

Question N60 F.tularensis is small, pleomorphic gram-negative rod, pathogenic, non-encapsulated, and the causative agent whooping cough.

Answer: (0)

Point: 0.25