Question N1 Long hair, hanging jewelry, and loose clothing can be dangerous in a lab.

Answer: 1

Point: 0.25

Question N2 You should wear safety goggle during every science block.

Answer: 1

Point: 0.0

Question N3 When studying a chemical it is important to touch, taste, and smell it so that you know a lot about it.

Answer: 0

Point: 0.25

Question N4 Microorganisms are involved in the following processes:

Answer: smog production.

Point: 0.0

Question N5 A prokaryotic cell may possess each of the following cellular components EXCEPT

Answer: ribosomes.

Point: 0.0

Question N6 The process of complete removal of all life forms including endospores is called

Answer: Sterilization

Point: 0.34999999999999998

Question N7 In the long-term disputes among supporters of two theories, the arguments supporting spontaneous generation were finally disproved in 19th century by

Answer: Robet Koch .

Point: 0.0

Question N8 A member of a large group of unicellular microorganisms lacking organelles and an organized nucleus, including some that can cause disease is

Answer: Archea

Point: 0.0

Question N9 In classification, the taxonomic category below kingdom, members of which all have a similar general body plan, is

Answer: Phylum

Point: 0.34999999999999998

Question N12 The Gram stain differentiates between bacteria based on the composition of their nucleus.

Answer: 0

Point: 0.25

Question N13 Which of the following is true about the structure of Gram positive cell wall

Answer: periplasmic space is absent

Point: 0.29999999999999999

Question N14 Which of the following is true about the structure of Gram positive cell wall

Answer: include significant amount of teichoic and lipoteichoic acids

Point: 0.20000000000000001

Question N15 A microorganism measures 4,5 μm in length. Its length in mm would be

Answer: 0.045 mm

Point: 0.0

Question N16 Which microscope is used to see internal structures of cells in a natural state (without staining) ?

Answer: fluorescence microscope

Point: 0.0

Question N17 The framework of the bacterial cell wall is

Answer: chitin;

Point: 0.0

Question N18 Which of the following organisms contain 70S ribosomes?

Answer: Prokaryotes

Point: 0.34999999999999998

Question N19 Which of the following statements is INCORRECT regarding prokaryotic cells?

Answer: They typically have a circular chromosome.

Point: 0.0

Question N20 Media can be either selective or differential, but they cannot be both.

Answer: 1

Point: 0.0

Question N23 A spore differs from an actively replicating bacterium in that the spore

Answer: is produced during a process involving asymmetric division

Point: 0.20000000000000001

Question N24 A spore differs from an actively replicating bacterium in that the spore

Answer: is able to withstand more extreme conditions than the replicating cell

Point: 0.20000000000000001

Question N25 A spore differs from an actively replicating bacterium in that the spore

Answer: is metabolically inactive

Point: 0.10000000000000001

Question N27 A toxic anion (O2-) with an unpaired electron is

Answer: Superoxide radicals

Point: 0.34999999999999998

Question N28 Essential organic compounds an organism is unable to synthesize

Answer: Organic growth factors

Point: 0.34999999999999998

Question N29 Which of the following types of media is designed to suppress the growth of unwanted bacteria and encourage the growth of desired microbes?

Answer: Selective media

Point: 0.34999999999999998

Question N30 Use this typical bacterial growth curve to answer the following question: Which section shows a growth phase where the number of cells dying equals the number of cells dividing?

Answer: A and C

Point: 0.0

Question N31 Use this typical bacterial growth curve to answer the following question: Which section shows a growth phase where the number of cells dying exceeds the number of cells dividing?

Answer: A

Point: 0.0

Question N32 Agents which kills bacteria are called bacteriocidal and agents which only inhibited its growth are called bacteriostatic.

Answer: 1

Point: 0.25

Question N33 Disinfectants are chemical substances that destroy or inhibit the growth of microorganisms in living tissues.

Answer: 1

Point: 0.0

Question N34 3 examples of moist heat:, ,

Answer: autoclaving

Point: 0.20000000000000001

Question N35 3 examples of moist heat:, ,

Answer: boiling

Point: 0.10000000000000001

Question N36 3 examples of moist heat:, ,

Answer: pasteurization

Point: 0.20000000000000001

Question N37 Lister developed his ideas on prevention of infection during medical procedures after studying the work of

Answer: Pasteur

Point: 0.34999999999999998

Question N42 If you knew the sequence of nucleotides within a gene, you could determine with the most accuracy the secondary structure of a protein

Answer: 1

Point: 0.0

Question N43 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 N44 Which of the following is true about mycoplasma?

Answer: Multiplication is by binary fission

Point: 0.20000000000000001

Question N45 Which of the following is true about mycoplasma?

Answer: Resistant to antibiotics targeting cell wall synthesis

Point: 0.29999999999999999

Question N46 The Bergey’s manual of determinative bacteriology is based on the following EXCEPT

Answer: rRNA sequencing

Point: 0.34999999999999998

Question N47 If two organisms have similar rRNA sequences, you can conclude that they

Answer: will have different G-C ratios.

Point: 0.0

Question N48 Which of the following statements about archaea is FALSE?

Answer: They lack peptidoglycan in their cell walls.

Point: 0.0

Question N49 A genus can best be defined as

Answer: a taxon belonging to a species.

Point: 0.0

Question N50 Which of the following is the best evidence for a three-domain system?

Answer: There are three distinctly different types of nuclei.

Point: 0.0

Question N51 The science that deals with when diseases occur and how they are transmitted is called epidemiology.

Answer: 1

Point: 0.25

Question N52 Houseflies, as biological vectors, can transmit important diseases.

Answer: 1

Point: 0.0

Question N53 Normal microbiota can benefit the host by preventing the overgrowth of harmful microorganisms. This is called microbial antagonism.

Answer: 1

Point: 0.25

Question N54 Which of the following can contribute to postoperative infections?

Answer: using syringes more than once

Point: 0.20000000000000001

Question N55 Which of the following can contribute to postoperative infections?

Answer: normal microbiota on the operating room staff

Point: 0.10000000000000001

Question N56 Which of the following can contribute to postoperative infections?

Answer: errors in aseptic technique

Point: 0.10000000000000001

Question N57 Which of the following can contribute to postoperative infections?

Answer: antibiotic resistance

Point: 0.10000000000000001

Question N58 All of the following are used by bacteria to attach to host cells EXCEPT

Answer: capsules.

Point: 0.0

Question N59 Which of the following statements about staphylococcal enterotoxin is FALSE?

Answer: It is produced by Staphylococcus aureus growing in the host's intestines.

Point: 0.34999999999999998

Question N60 Which of the following contributes to the virulence of a pathogen?

Answer: numbers of microorganisms that gain access to a host, evasion of host defenses, and toxin production

Point: 0.34999999999999998

Question N61 Twenty-five people developed symptoms of nausea, vomiting, and diarrhea three to six hours after attending a church picnic where they ate a ham and green bean casserole with cream sauce. The most likely cause of this case of food intoxication is

Answer: erythrogenic toxin.

Point: 0.34999999999999998

Question N62 Which of the following statements about M protein is FALSE?

Answer: It is readily digested by phagocytes.

Point: 0.34999999999999998

Question N63 Antifungal drugs do not affect eukaryotic cells

Answer: 1

Point: 0.0

Question N64 Most of the available antimicrobial agents are effective against bacteria

Answer: 1

Point: 0.25

Question N65 If a microbial drug prevents microbes from growing, its action is termed bactericidal

Answer: 1

Point: 0.0

Question N66 Which of the following antibiotics are used to treat fungal infections?

Answer: polyenes

Point: 0.29999999999999999

Question N67 Which of the following antibiotics are used to treat fungal infections?

Answer: bacitracin

Point: 0.0

Question N68 Which of the following antimicrobial agents is recommended for use against fungal infections?

Answer: amphotericin B

Point: 0.34999999999999998

Question N69 In Table 1, the minimal bactericidal concentration of antibiotic X is

Answer: 15 μg/ml.

Point: 0.34999999999999998

Question N70 More than half of our antibiotics are

Answer: produced by bacteria.

Point: 0.34999999999999998

Question N71 To date, most of our natural antibiotics have been found to be produced by members of what genus?

Answer: Streptomyces

Point: 0.34999999999999998

Question N72 Which of the following is mismatched?

Answer: Florey and Chain - identification of Penicillium as the producer of penicillin

Point: 0.34999999999999998

Question N73 Patients with respiratory anthrax show flu-like symptoms, eventually causing respiratory distress.

Answer: 1

Point: 0.25

Question N74 The major virulence factor of Corynebacterium diphtheriae is diphtheria toxin: an A-B exotoxin; inhibits protein synthesis.

Answer: 1

Point: 0.25

Question N75 Which of the following properties are the characteristics of tetanospasmin?

Answer: It is a heat-labile protein

Point: 0.20000000000000001

Question N76 Which of the following properties are the characteristics of tetanospasmin?

Answer: It is a neurotoxin

Point: 0.10000000000000001

Question N77 Which of the following properties are the characteristics of tetanospasmin?

Answer: It is a heat-stable protein

Point: 0.0

Question N78 Nagler's reaction is useful for the identification of

Answer: C botulinum

Point: 0.0

Question N79 The CSF from a 2-week-old infant with meningitis shows rods with tumbling motility. These bacteria are found to be Gram-positive and do not form spores. What is the most likely agent?

Answer: Actinomyces

Point: 0.0

Question N80 A 36-year-old man presents with focal central nervous system signs. Imaging shows a brain abscess. The dominant organism is an anaerobe normally found as part of the oral flora. Which of the following best fits that description?

Answer: Pseudomonas aeruginosa

Point: 0.0

Question N81 A 30-year-old woman was hospitalized after she experienced convulsions. On examination, she was alert and oriented and complained of a fever, headache, and stiff neck. Any of the following organisms could be responsible for her symptoms EXCEPT

Answer: Listeria monocytogenes.

Point: 0.0

Question N82 Initial treatment for tetanus in an unimmunized person with a deep contaminated wound is

Answer: penicillin.

Point: 0.0

Question N83 The most common causative agent of bacterial pneumonia is Streptococcus pneumoniae.

Answer: 0

Point: 0.0

Question N84 Streptococcus pyogenes is the most common and most important bacteria responsible for pharyngitis

Answer: 1

Point: 0.25

Question N85 Vaccines are not available for streptococcal diseases other than streptococcal pneumonia because of the large number of serotypes

Answer: 1

Point: 0.25

Question N86 Which of the following condition is non-suppurative sequelae of Streptococcus pyogenes infections?

Answer: Acute glomerulonephritis

Point: 0.20000000000000001

Question N87 Which of the following condition is non-suppurative sequelae of Streptococcus pyogenes infections?

Answer: Erythema nodosum

Point: 0.10000000000000001

Question N88 Which of the following condition is non-suppurative sequelae of Streptococcus pyogenes infections?

Answer: Toxic shock syndrome

Point: 0.0

Question N89 Which of the following Staphylococcal haemolysins does not cause lysis of human RBCs?

Answer: β haemolysin

Point: 0.0

Question N90 A gram-positive coccus that grows in pairs or short chains and that is alpha-hemolytic and optochin-resistant is

Answer: Streptococcus pyogenes

Point: 0.0

Question N91 \_\_\_\_\_\_\_\_\_\_ test is used to differentiate Staphylococci from Streptococci

Answer: Coagulase test

Point: 0.0

Question N93 Which organism produces a toxin that causes scalded skin syndrome?

Answer: Staphylococcus aureus

Point: 0.34999999999999998

Question N94 S typhimurium and S enteritidis can cause gastroenteritis

Answer: 1

Point: 0.25

Question N95 Verotoxin 1 of Escherichia coli is similar to shiga toxin.

Answer: 1

Point: 0.25

Question N99 Transmission of pneumonic plague from man to man is through

Answer: inoculation

Point: 0.0

Question N100 The agent(s) which can cause plague is/are

Answer: All of these

Point: 0.0

Question N101 A major difference between EHEC and EPEC is

Answer: EPEC rearranges host cell actin and EHEC does not

Point: 0.0

Question N102 Which of the following statements about salmonellosis is FALSE?

Answer: The mortality rate is high.

Point: 0.34999999999999998

Question N103 exotoxins are produced by all of the following gastro-intestinal pathogens EXCEPT

Answer: Staphylococcus aureus

Point: 0.0

Question N104 Pseudomonas aeruginosa can infect plants as well as humans?

Answer: 1

Point: 0.25

Question N105 P. aeruginosa is motile by several peri-trichous flagellae?

Answer: 0

Point: 0.25

Question N106 The substance(s) which can be produced by strains of Pseudomonas aeruginosa is/are

Answer: Exotoxins A and S

Point: 0.20000000000000001

Question N107 The substance(s) which can be produced by strains of Pseudomonas aeruginosa is/are

Answer: Elastase

Point: 0.20000000000000001

Question N108 The substance(s) which can be produced by strains of Pseudomonas aeruginosa is/are

Answer: Haemolysins

Point: 0.10000000000000001

Question N109 Which one of the given statements is not true about Pseudomonads?

Answer: All species cause diseases in humans only

Point: 0.34999999999999998

Question N110 Pseudomonas aeruginosa produces a water-soluble blue color pigment called pyocyanin and …............ color pigment pyoverdin.

Answer: Red

Point: 0.0

Question N111 Patients with cystic fibrosis infection suffer from a chronic lung infection caused by Pseudomonas aeruginosa. The bacterial growth results in …........formation and clogs the lung airways.

Answer: Biofilm

Point: 0.34999999999999998

Question N112 Isolation of Pseudomonas aeruginosa from a mucoid sputum specimen obtained from a patient with cystic fibrosis is usually done by standard culture method. After the incubation, mucoid bacterial colonies can be seen on the agar media which have a grape-like odor, what are the best growth temperature and incubation period for the given bacteria?

Answer: 42 degree Celsius for 48 hours

Point: 0.34999999999999998

Question N113 All of the following statements for Pseudomonas aeruginosa are true, except;

Answer: It does not grow well at 42c

Point: 0.34999999999999998

Question N114 Massive human-to-human transmission of plague is usually result of unsanitary conditions

Answer: 1

Point: 0.0

Question N115 One of the characteristic symptoms of brucellosis is rise of a temperature up to 40°C each evening

Answer: 1

Point: 0.25

Question N116 What were the symptoms of the Black Death?

Answer: Black swellings the size of eggs on the armpits or groin

Point: 0.20000000000000001

Question N117 What were the symptoms of the Black Death?

Answer: Fever, headaches, and vomiting

Point: 0.20000000000000001

Question N118 What were the symptoms of the Black Death?

Answer: Dark spots on the skin

Point: 0.10000000000000001

Question N119 Brucella are

Answer: Very short rods

Point: 0.34999999999999998

Question N120 Which of the following is NOT the virulence factors responsible for the pathogenicity of Bordetella pertussis, a gram-negative coccobacillus that causes “whooping cough”?

Answer: A tracheal cytotoxin

Point: 0.0

Question N121 Which of the following bacteria is responsible for “Malta fever” in humans which is caused primarily by contact with animals or animal products?

Answer: Brucella spp

Point: 0.34999999999999998

Question N122 All of the following are the symptoms caused by the pathogenic Brucella spp, EXCEPT

Answer: Lesions on eyelids

Point: 0.34999999999999998

Question N123 Mycoplasma is the smallest of known free-living, self-replicating prokaryotic cells - 125-250 nm in size , comparable to chlamydias or large viruses.

Answer: 0

Point: 0.0

Question N124 Etiological agent for disease known as Primary Atypical Pneumonia (“Walking Pneumonia”) is Mycoplasma pneumoniae.

Answer: 1

Point: 0.25

Question N125 A patient receiving medical treatment for an active tuberculosis infection asks when she can starting going out in public again. You respond that she is no longer contagious when:\*

Answer: She has 3 negative sputum cultures

Point: 0.20000000000000001

Question N126 A patient receiving medical treatment for an active tuberculosis infection asks when she can starting going out in public again. You respond that she is no longer contagious when:\*

Answer: Her signs and symptoms improve

Point: 0.10000000000000001

Question N127 A patient receiving medical treatment for an active tuberculosis infection asks when she can starting going out in public again. You respond that she is no longer contagious when:\*

Answer: She has been on tuberculosis medications for about 3 week

Point: 0.20000000000000001

Question N128 For a two year old child with suspected TB, the best clinical specimen for pulmonary TB diagnosis is:

Answer: Sputum

Point: 0.0

Question N129 What is the minimum recommended number and timing of specimens for the diagnosis of pulmonary TB?

Answer: Two sputum specimens collected one hour apart

Point: 0.34999999999999998

Question N130 In a woman with infertility, suspected to have genito-urinary TB, which of the following specimens is important for diagnosis?

Answer: Endometrial tissue

Point: 0.34999999999999998

Question N131 Which of these statements is NOT true about chest radiology for TB diagnosis?

Answer: Treatment of TB purely on the basis of x-rays can result in significant over-treatment

Point: 0.0

Question N132 A 55 year old 40 pack year smoker consults with you for a 2 month history of cough and blood tinged sputum (no fever). He reports that his sister had TB 10 years ago. The CXR shows a cavitary mass in the RUL. What is the next step?

Answer: Send patient for a bronchoscopy

Point: 0.34999999999999998

Question N133 Ticke-borne B. recurrentis has shorter louse-borne infection.

Answer: 1

Point: 0.25

Question N135 The elementary body form of Chlamydia trachomatis infects host cells which are primarily what?

Answer: Nonciliated columnar cells

Point: 0.20000000000000001

Question N136 The elementary body form of Chlamydia trachomatis infects host cells which are primarily what?

Answer: Transitional epithelial cells

Point: 0.29999999999999999

Question N137 The Elementary body outer membrane is similar to that of Gram negative organism; most prominent component is the \_\_\_\_\_\_\_\_\_\_.

Answer: Major outer membrane protein

Point: 0.34999999999999998

Question N138 In the U.S., chlamydia occurs more often than any other sexually transmitted infection (STI). Who can be infected with chlamydia?

Answer: Any sexually active person

Point: 0.34999999999999998

Question N139 Chlamydia is called the silent disease because it often goes undetected. What portion of infected men and women have symptoms of chlamydia?

Answer: 1 in 2 men, and 4 in 5 women

Point: 0.0

Question N140 Spirochaetes exhibit

Answer: all of the above

Point: 0.34999999999999998

Question N141 Which sexually transmitted disease is caused by a spirochete?

Answer: leptospirosis

Point: 0.0