BIO217

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Question: \_\_\_\_\_ was the first to grow bacteria on solid culture media to getpure culture.

Answer: Robert Koch

Question: \_\_\_\_\_ deals with the discovery of microbial enzymes and the chemical reactions they carry out.

Answer: Biochemistry

Question: The branch of Microbiology which studies the structures of microbial cells is called \_\_\_\_.

Answer: Microbial Cytology

Question: \_\_\_\_\_ are essential animal nutritional factors.

Answer: Vitamins

Question: Protists which have different forms at different stages of theirlife cycles are called ­­\_\_\_\_\_.

Answer: Slime Moulds

Question: Protozoa are normally found in \_\_ habitat.

Answer: moist

Question: Protozoa exist in free living and \_\_\_\_\_forms.

Answer: symbiotic

Question: \_\_\_\_\_ is a plant hormone is formed by the fungus.

Answer: Gibberellic acid

Question: The avoidance of infection and food spoilage by eliminating microorganisms from the surrounding is termed \_\_\_\_.

Answer: hygiene

Question: Microorganisms from the surroundings can be totally removed by\_\_\_\_\_ method.

Answer: Sterilization

Question: Microbes are used in biogas reactions to produce \_\_\_\_\_.

Answer: Methane

Answer: natural gas

Question: The bacteria <em>\_\_\_\_\_\_ </em>recover copper and uranium from their ores.

Answer: Thiobacillus feroxidans

Question: Biological warfare is otherwise known as \_\_\_\_\_ warfare.

Answer: Germ

Question: <p style="text-align:justify">An increase in the number of cells in a population of microorganisms is referred to as \_\_\_\_\_\_\_.

Answer: growth

Question: In microbes that have cell walls, the membrane shrinks away from the cell wall by a process called \_\_\_.

Answer: plasmolysis

Question: The use of incinerator is an example of \_\_\_\_ sterilization.

Answer: Dry heat

Question: <p style="text-align:justify">The killing, inhibition or removal of organisms that may be capable of causing disease is termed \_\_\_\_\_.

Answer: disinfection

Question: Bacteria are 0.5 to \_\_\_\_ μm in diameter.

Answer: 1.0

Question: Based on their source of nutritive energy, bacteria are classified as \_\_\_ and \_\_\_\_.

Answer: Phototrophs, Chemotrophs

Answer: Chemotrophs, Phototrophs

Question: Bacterial cell wall is made up of \_\_\_\_\_.

Answer: peptidoglycan

Question: Bacteria are classified based on differences in the \_\_\_ of cell wall

Answer: composition

Question: \_\_\_\_ act as protection against drying and bacteriophages

Answer: Capsules

Answer: Capsule

Question: Fungi comprise the molds, mushrooms and \_\_\_\_.

Answer: yeasts

Question: The vegetative structure of a fungus is called \_\_\_\_.

Answer: thallus

Question: \_\_\_\_\_ are the most numerous microorganisms on earth.

Answer: Viruses

Question: \_\_\_\_ can be used for detecting and isolating mutants.

Answer: replace planting

Question: <p style="text-align:justify">A \_\_\_\_\_ is a strain of any cell carrying a change in the nucleotide sequence.

Answer: mutant

Question: Paramecium moves rapidly by \_\_\_ beating of the cilia.

Answer: rhythmic

Question: Classification of Protozoa is by the use of \_\_\_\_.

Answer: general characterisrics

Question: Phytomastigophora are divided into \_\_ groups.

Answer: two

Answer: 2

Question: The Rhodophycophyta are found in the \_\_\_ habitat.

Answer: aquatic

Question: The fungal cell is usually enclosed in a cell wall of \_\_\_\_\_.

Answer: chitin

Question: Yeasts reproduce sexually through \_\_\_\_\_.

Answer: spore formation

Question: In Fungi, hyphae with cross walls are called \_\_\_\_\_.

Answer: septate

Question: In Fungi, hyphae without cross walls are called \_\_\_\_\_.

Answer: coenocytic

Answer: aseptate

Question: Obligate anaerobic fungi are found in the \_\_\_\_.

Answer: rumen of cattle

Question: Asexual reproduction is also called \_\_\_\_\_ reproduction

Answer: somatic

Answer: vegetative

Question: The sex organelles of fungi are called \_\_\_\_\_.

Answer: gametangia

Question: \_\_\_\_\_ are important research tools in the study of fundamentalProcesses.

Answer: Fungi

Question: The most numerous microorganisms on earth are \_\_\_\_\_.

Answer: Viruses

Question: The smallest viruses are a little larger than \_\_\_\_.

Answer: ribosomes

Question: Virus particles can be counted indirectly by the \_\_\_\_ assay.

Answer: hemagglutination

Question: Nutrition in protozoa is \_\_\_\_\_,

Answer: heterotrophic

Question: \_\_\_\_\_\_ are used to degrade biological and industrial effluents.

Answer: Protozoa

Answer: Protozoans

Question: An an open culture is also called a \_\_\_\_ culture.

Answer: continuous

Question: Two major types of continuous culture system commonly used are chemostats and \_\_\_\_\_.

Answer: turbidostats

Question: Microbial growth measurement helps to determine the growth rate and\_\_\_\_\_.

Answer: generation time

Question: The total number of microbial cells can be achieved by using \_\_\_\_ methods

Answer: direct count

Question: The amount of water available to microorganism is expressed in terms of the \_\_\_\_\_.

Answer: water activity

Answer: aw

Question: Moist heat sterilization involves the use of \_\_\_\_\_.

Answer: Autoclave

Question: Which of the following is not a characteristic of the mycobacterium?

Answer: they are either anaerobes or preferentially anaerobic

Question: Which of the following is not a feature of the Endospore form gram – positive bacteria?

Answer: they have a fermentative type of metabolism

Question:   Which of the following bacteria is associated with plant roots, nitrogen fixation?

Answer:  Azospirillum

Question: Which of the following is not a microbial taxonomic rank?

Answer: Number of children in a family

Question: The following processes result in variation in microorganisms except \_\_\_\_\_.

Answer: gene association

Question: The following are external structure of a bacterial cell wall except \_\_\_\_.

Answer: spores

Question: The following are physiological and metabolic characteristics used in classifying microorganisms except \_\_\_\_.

Answer: osmotic concentration

Question: Which of the following radiation types induces the formation of thymine dimmers and strand breaks in DNA?

Answer: ultraviolet radiation

Question: Which of the following classes of microorganisms has growth optima around 20° C to 45° C?

Answer: Mesophiles

Question:   Atmospheric nitrogen is directly useable by most organisms but has to be converted to stable organic form such as \_\_\_\_ and \_\_\_\_

Answer:  Ammonium and Nitrate

Question: Which of the following statements is not correct about raw data?

Answer: it lacks heterogeneity

Question: The microscope used to observe living unstained cells and organisms as a result of change in the way they are illuminated is \_\_\_.

Answer: Dark field microscope

Question: The following are types of staining except \_\_\_.

Answer: Chemical fix staining

Question: A biological weapon may be used to \_\_\_ a person.

Answer: All of the options

Question: The following are types of microbial warfare agent except \_\_.

Answer: algae

Question: Microorganisms possess the following characteristics except\_\_\_.

Answer: reproduction by binary fusion

Question: shapes of bacterial cells except \_\_\_\_\_.

Answer: radial

Question: The following are flagella types except \_\_\_\_.

Answer: Limphotrichous

Question: The following are types of asexual spores in fungi except \_\_\_\_.

Answer: Chemydospores

Question: The following are methods of sexual reproduction in fungi except \_\_\_\_\_.

Answer: Genital copulation

Question: Molds and yeasts are used in the production of the following except \_\_\_\_.

Answer: soy-milk

Question: Molds and yeasts are important research tools in the study of the following fundamental processes except \_\_\_.

Answer: medicine

Question: Viruses differ from living cells in the following ways except \_\_\_.

Answer: they have both DNA and RNA in almost all virons

Question: The following are characteristic of viruses except \_\_\_\_\_\_.

Answer: they range in size from 20-400µm

Question: The following are types of capsid symmetry except \_\_\_\_.

Answer: isohedral

Question: The following are characteristic of algae except \_\_\_\_\_\_.

Answer: they are prokaryotic organisms

Question: \_\_ is not an economic product derived from algal cell wall.

Answer: Succinate

Question: The following are locomotory organelles in protozoa except \_\_.

Answer: Lenticels

Question: The following are means of reproduction in prokaryotes except \_\_\_.

Answer: binary fusion

Question: \_\_\_ is not a step of septation

Answer: linkage of the Z ring to the septum

Question: The following are phases of microorganisms’ growth curve except \_\_\_.

Answer: Lap

Question: The following are methods of measuring total cell number of organisms except \_\_\_\_\_.

Answer: spectrophotometry

Question: The following are disadvantages of the viable counting methods except \_\_\_\_.

Answer: they are simple technique sensitive

Question: Prokaryotes that have growth optima between 80ºC and 115ºC are called \_\_\_\_.

Answer: Hyperthermophiles

Question: \_\_\_ is not a physical method used for sterilization.

Answer: high temperature

Question: Autoclaving uses \_\_\_ under pressure.

Answer: Steam

Question: The following are characteristics of an ideal disinfectant except \_\_\_\_\_.

Answer: it must have a high surface tension

Question: \_\_\_ are used as disinfectants in hospital and laboratories.

Answer: Phenolics

Question: \_\_\_ can both sterilize and disinfect. I. formaldehydes II. alcohols III. glutaraldehydes

Answer: I and III

Question: \_\_\_\_ is not a method used in the classic approach to taxonomy.

Answer: Genetic

Question: \_\_\_ is not a characteristic used in the classic approach to determining microbial taxonomy and phylogeny

Answer: biochemical

Question: The following are the genera of the Spirochetes except \_\_\_.

Answer: Brucella

Question: Aerobic bacteria whose cell walls contain large amounts of lipids are called \_\_\_ bacteria

Answer: Coryne

Question: Gram-negative, non-phototrophic bacteria that obtain energy for CO<sub>2</sub> fixation from the oxidation of Ammonia are known as \_\_ bacteria.

Answer: Chemolithotrophic

Question: Divisions within Bergey Manual of Systematic Bacteriology is based on the following characteristics except \_\_\_.

Answer: cell size

Question: Volume \_\_\_\_ bacteria are made up of bacteria with unusual properties based on the Bergey Manual of Systematic Bacteriology.

Answer: 3

Question: \_\_ are the earliest and simplest group of fungi.

Answer: Chytridiomycetes

Question: \_\_ are tiny unicellular parasites of animals and plants.

Answer: Microsporidea

Question: Systematic classification of fungi is based on \_\_\_. I. sequence analyses of 185 r RNA II some protein coding genes. III. Characteristics of sexual spores.

Answer: I, II and III

Question: Single cells, filamentous algae with pale green or yellow green pigments are known as \_\_\_.

Answer: Xanthophycophyta