Question: Biological warfare is otherwise known as _____ warfare.

Answer: Germ Question: 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: The killing, inhibition or removal of organism that may be capable of causing disease is termed _____. Answer: disinfection Question: Bacteria are 0.5 to 11/4 m 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 act as protection against drying and bacteriophages Question: 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: 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
Question: Phytomastigophora are divided into groups. Answer: two Answer: 2 Question: The Rhodophycophyta are found in the habitat.
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
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.Â 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 Â

Question: Â Â Which of the following bacteria is associated with plant roots, nitrogen fixation? Â Answer: Â AzospirillumÂ
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 Â
Answer: gene association Â
Question: The following are external structure of a bacterial cell wall exceptÂ
Question: The following are physiological and metabolic characteristics used in classifying microorganisms except Answer: osmotic concentrationÂ
Question: Which of the following radiation types induces the formation of thymine dimmers and strand breaks in DNA? Answer: ultraviolet radiation Â
Question: Which of the following classes of microorganisms has growth optima around $20\hat{A}^\circ$ C to $45\hat{A}^\circ$ C? \hat{A} Answer: Mesophiles \hat{A}
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 80°C and 115°C 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 Answer: I, II and III