|  |  |
| --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Microbiology Unit 3

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | 1I |  |  |  |  |  |  | 2V |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3M |  |  |
|  |  |  |  |  N |  |  | 4S |  E |  P |  T |  I |  C | 5E |  M |  I |  A |  |  |  |  | 6P |  |  |  |  |  |  I |  |  |
| 7O |  |  |  |  C |  |  |  |  |  |  |  R |  |  D |  |  |  | 8E |  |  |  |  R |  |  |  |  |  |  N |  |  |
|  P |  |  |  |  I |  |  |  |  |  |  |  U |  |  E |  |  |  |  P |  |  |  |  E |  |  |  |  |  |  I |  |  |
|  S |  |  |  |  D |  |  |  | 9I |  N |  F |  L |  A |  M |  M |  A |  T |  I |  O |  N |  |  V |  |  |  |  |  |  M |  |  |
|  O |  |  |  |  E |  |  |  |  |  |  |  E |  |  A |  |  |  |  T |  |  |  |  A |  |  |  |  |  |  U |  |  |
|  N |  | 10P |  E |  N |  I |  C |  I |  L |  L |  I |  N |  |  |  | 11S |  |  O |  |  |  |  L |  |  |  |  |  |  M |  |  |
|  I |  |  |  |  C |  |  |  |  |  |  |  C |  |  |  |  E |  |  P |  |  |  |  E |  | 12N |  |  |  |  I |  |  |
|  Z |  | 13A |  |  E |  | 14A |  N |  A |  M |  N |  E |  S |  T |  I |  C |  R |  E |  S |  P |  O |  N |  S |  E |  |  |  |  N |  | 15I |
|  A |  |  N |  |  |  |  |  |  |  |  |  |  |  |  |  O |  |  |  |  |  |  C |  |  U |  |  |  |  H |  |  N |
|  T |  |  T |  |  |  |  | 16H |  E |  R |  D |  I |  M |  M |  U |  N |  I |  T |  Y |  |  |  E |  |  T |  | 17V |  |  I |  |  F |
|  I |  |  I |  | 18M |  |  |  |  |  |  |  |  |  |  |  D |  |  |  |  |  |  |  |  R |  |  A |  |  B |  |  E |
|  O |  |  B |  |  E |  |  |  | 19P |  R |  O |  P |  H |  Y |  L |  A |  X |  I |  S |  |  |  |  |  O |  |  N |  |  I |  |  C |
|  N |  |  I |  |  M |  |  |  |  |  |  |  |  |  |  |  R |  |  |  | 20T |  |  |  |  P |  |  C |  |  T |  |  T |
|  |  |  O |  |  O |  | 21L |  | 22Z |  |  |  |  |  |  |  Y |  |  |  |  R |  | 23A |  |  H |  |  O |  |  O |  |  I |
| 24I |  N |  T |  E |  R |  F |  E |  R |  O |  N |  | 25V |  A |  C |  C |  I |  N |  A |  T |  I |  O |  N |  |  I |  |  M |  |  R |  |  O |
|  |  |  I |  |  Y |  |  U |  |  O |  |  |  |  |  |  |  N |  |  |  |  M |  |  T |  |  L |  |  Y |  |  Y |  |  U |
|  |  |  C |  |  C |  |  K |  |  N |  |  |  |  |  |  |  F |  |  |  |  E |  |  I |  |  |  |  C |  |  C |  |  S |
|  |  |  |  |  E |  |  O |  |  O |  | 26C |  O |  M |  P |  L |  E |  M |  E |  N |  T |  |  G |  |  |  |  I |  |  O |  |  D |
|  |  |  |  |  L |  |  C |  |  S |  |  |  |  |  |  |  C |  |  |  |  H |  |  E |  |  |  |  N |  |  N |  |  O |
|  |  |  |  |  L |  |  Y |  |  I |  |  | 27S |  Y |  M |  P |  T |  O |  M |  |  O |  |  N |  |  |  |  |  |  C |  |  S |
|  |  |  |  |  S |  |  T |  |  S |  |  |  |  |  |  |  I |  |  |  |  P |  |  |  | 28A |  |  |  |  E |  |  E |
|  |  |  |  |  |  |  E |  |  | 29C |  E |  P |  H |  A |  L |  O |  S |  P |  O |  R |  I |  N |  |  N |  |  |  |  N |  |  |
|  |  |  |  | 30T |  |  |  |  |  |  |  |  |  |  |  N |  |  |  |  I |  |  |  |  T |  |  |  |  T |  |  |
|  |  | 31B |  R |  O |  A |  D |  S |  P |  E |  C |  T |  R |  U |  M |  |  |  | 32I |  M |  M |  U |  N |  I |  T |  Y |  |  R |  |  |
|  |  |  |  |  X |  |  |  |  |  |  |  |  |  |  | 33T |  |  |  |  |  |  |  |  B |  |  |  |  A |  |  |
|  | 34C |  Y |  T |  O |  K |  I |  N |  E |  |  | 35N |  O |  S |  C |  O |  M |  I |  A |  L |  | 36P |  R |  O |  B |  I |  O |  T |  I |  C |
|  |  |  |  |  I |  |  |  |  |  |  |  |  |  |  |  X |  |  |  |  |  |  |  |  D |  |  |  |  I |  |  |
|  |  |  |  |  D |  |  |  |  |  |  |  |  |  |  |  I |  |  |  |  |  |  |  |  Y |  |  |  |  O |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 37A |  T |  T |  E |  N |  U |  A |  T |  E |  D |  |  |  |  |  |  |  N |  |  |

|  |  |
| --- | --- |
| **Across****4.** Systemic infection associated with microorganisms multiplying in circulating blood.**9.** A natural, nonspecific response to tissue injury that protects the host from further damage. It stimulates immune reactivity and blocks the spread of an infectious agent.**10.** A large group of naturally occurring and synthetic antibiotic produced by Penicillium mold and active against the cell wall of bacteria. Most important natural forms used to treat gram-positve cocci, some gram-negative bacteria.**14.** In immunology, an augmented response or memory related to a prior stimulation of the immune system by antigen. It boosts the levels of immune substances.**16.** The status of collective acquired immunity in a population that reduces the likelihood that nonimmune individuals will contract and spread infection. One aim of vaccination is to induce herd immunity.**19.** Use of a drug to prevent imminent infection of a person at risk.**24.** Natural human chemical that inhibits viral replication; used therapeutically to combat viral infections and cancer.**25.** Exposes a person to a specially prepared microbial stimulus, in a form that doe-s not cause the disease.**26.** In immunology, serum protein components that act in a definite sequence when set in motion either by an antigen-antibody complex or by factors of the alternative (properdin) pathway.**27.** The subjective evidence of infection and disease as perceived by the patient.**29.** A group of broad-spectrum antibiotics isolated from the fungus Cephalosporium.**31.** Denotes drugs that have an effect on a wide variety of microorganisms.**32.** An acquired resistance to an infectious agent due to prior contact with that agent.**34.** A chemical substance produced by white blood cells and tissue cells that regulates development, inflammation, and immunity.**35.** An infection not present upon admission to a hospital but incurred while being treated there.**36.** Preparations of live microbes used as a preventive or therapeutic measure to displace or compete with potential pathogens.**37.** To reduce the virulence of a pathogenic bacterium or virus by passing it through a nonnative host or by long-term subculture. | **Down****1.** In epidemiology, the number of new cases of a disease occurring during a period.**2.** In infection, the relative capacity of a pathogen to invade and harm host cells.**3.** The smallest concentration of drug needed to visibly control microbial growth.**5.** The accumulation of excess fluid in cells, tissues, or serous cavities. Also called swelling.**6.** The total number of cases of a disease in a certain area and time period.**7.** The process of stimulating phagocytosis by affixing molecules to the surfaces of foreign cells or particles.**8.** The precise molecular group of an antigen that defines its specificity and triggers the immune response.**11.** An infection that compounds a preexisting one.**12.** A mature granulocyte present in peripheral circulation, exhibiting a multilobular nucleus and numerous cytoplasmic grannules that retain a neutral stain. Active phagocytic cell in bacterial infection.**13.**  A chemical substance from one microorganism that can inhibit or kill another microbe even in minute amounts.**15.** Infection will proceed only if a minimum number is present.**17.** Antibiotic that targets the bacterial cell wall; used often in antibiotic resistant infections. Narrow spectrum of action; used to treat staphylococcal infections in cases of penicillin and methicillin resistance or in patients with an allergy to penicillin.**18.** The long-lived progeny of a sensitized lymphocyte that remains in circulation and is genetically programmed to react rapidly with its antigen.**20.** Inhibits the enzymatic step immediately preceding the step inhibited by sulfonamides; trimethoprim often given in conjunction with sulfamethoxazole because of this synergistic effect; used to treat Pneumocystis jiroveci in AIDS patients.**21.** White blood cells. The primary infection-fighting blood cells.**22.** An infectious disease indigenous to animals that humans can acquire through direct or indirect contact with infected animals.**23.** Any cell, particle, or chemical that induces a specific immune response by B cells or T cells and can stimulate resistance to an infection or a toxin.**28.** A large protein molecule evoked in response to an antigen that interacts specifically with that antigen.**30.** A toxin that has been rendered nontoxic but is still capable of eliciting the formation of protective antitoxin antibodies; used in vaccines.**33.** A specific chemical product of microbes, plants, and some animals that is poisonous to other organisms. |