

Microbiology
Unit 5 Test Review

Name: KEY Date: _____ Hour: _____ Test #: _____

1. Define the following terms and give examples (when applicable):

- a. Epidemiology: the study of disease occurrence in human populations
- b. CDC: federal agency that keeps data on disease occurrence and carries out prevention programs
- c. Morbidity: the incidence of specific diseases
- d. Mortality: the number of deaths resulting from a specific disease
- e. Antigen: a substance that induces the formation of antibodies because it is recognized as a threat
- f. Antibody: a blood protein produced by the immune system as a response to a specific antigen
- g. Opportunistic infection: an infection caused by microbes that are "normal flora" or "non-pathogens"

2. What six situations lead to opportunistic infections?

- a. Use of immunosuppressants to prevent rejection of organ transplants
- b. Use of chemotherapy or irradiation
- c. Use of kidney dialysis or heart pumps
- d. Frequent use of urethral catheters
- e. Use of antibiotics
- f. Poor nutritional status

3. What symptoms are common to many diseases? Malaise, Headache, Fever, Chills, cough

4. Which specimen is considered to be sterile? Blood

5. What are the three different levels of diagnosis?

- a. Clinical Diagnosis - diagnosis of a disease using physical symptoms only
- b. Presence of antibody against the disease antigen in a patient's blood specimen
- c. Isolation and identification of disease-causing organisms (BEST specific diagnosis but pending upon proper specimen collection)

6. What does an epidemiologist study?

- a. Who gets a disease?
- b. How does an individual acquire the disease?
- c. How can the disease be prevented?
- d. What is the source of a disease agent causing an unexplained number of infections?
- e. What is the source of an infectious agent causing a previously undescribed disease?

7. What are the three primary rules for collection and delivery of specimens?
- Collect adequate amount of correct specimen.
 - Transport quickly to lab to prevent death or contamination of causative organism.
 - Inoculate specimen into growth medium if needed.
8. What causes most urinary tract infections? Normal Flora
9. What is the procedure for collection of intestinal specimens? Can be voided or collected with a sterile cotton swab inserted past the anal sphincter and rotated.
10. Describe the procedure for the collection of specimens from wounds or abscesses? Collect using a sterile needle and syringe. Do not expose to O_2 . Most bacteria in wounds or abscesses are obligate anaerobes.