**Epidemiology and Disease Transmission**

1. Define:

   **Epidemiology** – Epidemiology is the quantitative study of the occurrence of disease and factors that influence disease frequency and distribution. The overall goal of epidemiologists is disease prevention.

   **Endemic** – A disease is considered to be endemic to an area or to a population if it tends to affect a small percentage of the population at a fairly constant rate. Plague is endemic to rodent populations in this region of California, and rabies is endemic to populations of skunks, raccoons, bats and other wild carnivores.

   **Reservoir** – The term reservoir refers to all the potential sources for a disease-causing agent. Reservoirs may be categorized as living or non-living and may include humans, other animals, soil, water, food materials, etc.

   **Zoonosis** – (pleural zoonoses) A disease is considered a zoonosis if it is one normally associated with non-human animals, but can be transmitted to humans. Plague and rabies (as mentioned above), are zoonoses.

   **Morbidity rate** – Morbidity rate refers to the number of individuals infected by a specific disease-causing agent within a given population and within a given time period. Morbidity and Mortality within the United States is published weekly by the Centers for Disease Control and Prevention (CDC). (http://www.cdc.gov/mmwr/)

2. Epidemiology/ The primary goal of epidemiologists is disease prevention.

3. Pathology

4. Centers for Disease Control and Prevention (CDC)/ World Health Organization (WHO)

5. Endemic/ sporadic

6. Epidemic/ pandemic

7. Soil/ vehicles

8. Matching letter sequence is – C, D, B, J, G, F, A, E, I, H

9. Fomites

10. Reservoirs/ zoonosis

11. Arthropods (ticks, fleas, mosquitoes, mites, etc.)


13. These diseases are maintained within living reservoirs (animal populations) that cannot be immunized or eliminated.
14. Direct
15. Indirect
16. Direct
17. Genetic background/ cultural habits/ virulence of the pathogen involved. **Note** – Natural immunity may also be acquired through exposure to pathogens in the environment.
18. Host resistance/ reservoirs
19. Morbidity/ mortality