1. A signaling molecule used in bacterial quorum sensing that regulates the transcription of quorum sensing genes best describes:

A. an autoinducer
B. an injectosome
C. a type 3 secretion system
D. A PAMP

2. Using motility to contact host cells and keep bacteria in an optimum environment via taxis, using pili and/or cell wall adhesins to attach to host cells, and using a glycocalyx to form microcolonies are all advantages of:

A. multicellular bacterial behavior.
B. injectosomes
C. quorum sensing genes.
D. individual cell bacterial behavior.

3. An entire population of bacteria simultaneously turn on their virulence genes, biofilm formation, and producing exoenzymes and toxins that damage host cells enabling the bacteria in the biofilm to obtain nutrients are all advantages of:

A. multicellular bacterial behavior.
B. injectosomes.
C. individual cell bacterial behavior.
D. interkingdom communication.

4. Bacteria using quorum sensing to "talk" to members their own species is referred to as:

A. intraspecies communication.
B. interspecies communication.
C. interkingdom communication.

5. Interspecies communication refers to bacteria using quorum sensing to:

A. communicate with members of their own species.
B. communicate with members of another genus or species.
C. communicate with their animal or plant host cells.

6. Some bacteria can directly inject bacterial effector molecules into the cytoplasm of the host cell in order to alter its cellular machinery or cellular communication to the benefit of the bacteria. This is done using:

A. type 3 secretion systems.
B. type 6 secretion systems.
C. type IV pili
D. A and B
E. A, B, and C