

Milestones in Microbiology

Microbiology · Practice Test · 12 Questions

1. Who is credited with being the first person to observe and describe 'animalcules' using a primitive single-lens microscope?

- A) Antonie van Leeuwenhoek
- B) Robert Hooke
- C) Louis Pasteur
- D) Robert Koch

2. Which scientist is recognized for developing the process of pasteurization to prevent wine and beer from souring?

- A) Joseph Lister
- B) Louis Pasteur
- C) Edward Jenner
- D) Ferdinand Cohn

3. In 1882, Robert Koch discovered the causative agent of which significant human disease?

- A) Cholera
- B) Tuberculosis
- C) Smallpox
- D) Plague

4. What term did Robert Hooke coin in 1665 after observing cork tissue under a microscope?

- A) Organelle
- B) Nucleus
- C) Cell
- D) Bacteria

5. Who is considered the father of antiseptic surgery for his introduction of carbolic acid to sterilize surgical instruments?

- A) Ignaz Semmelweis
- B) Alexander Fleming
- C) Joseph Lister
- D) Paul Ehrlich

6. The first antibiotic, penicillin, was discovered by Alexander Fleming in 1928 from which mold genus?

- A) Aspergillus
- B) Penicillium
- C) Rhizopus
- D) Fusarium

7. What set of four criteria did Robert Koch formulate to establish a causal relationship between a microbe and a disease?

- A) Koch's postulates
- B) Pasteur's laws
- C) The germ theory
- D) The taxonomic hierarchy

8. Who pioneered the use of the smallpox vaccine in 1796, marking the first successful vaccination?

- A) Louis Pasteur
- B) Edward Jenner
- C) Robert Koch
- D) John Snow

9. Which scientist is famous for disproving the theory of spontaneous generation using a swan-neck flask experiment?

- A) Lazzaro Spallanzani
- B) Louis Pasteur
- C) Francesco Redi
- D) John Tyndall

10. Sergei Winogradsky is best known for discovering which fundamental biological process in microbes?

- A) Chemolithotrophy
- B) Photosynthesis
- C) Binary fission
- D) Fermentation

11. Who was the first to visualize the structure of DNA using X-ray diffraction, which eventually led to understanding the genetic basis of microbes?

- A) Rosalind Franklin
- B) Barbara McClintock
- C) Dorothy Hodgkin
- D) Ada Lovelace

12. Dmitri Ivanovsky is credited with the discovery of what type of infectious agent in 1892, which was too small to be trapped by porcelain filters?

- A) Prions
- B) Viroids
- C) Viruses
- D) Mycoplasma