

## SELF-ASSESSMENT TEST: BASIC LEVEL

1. Bacterial genome consists of:
  - a) one molecule of dsDNA
  - b) DNA or RNA
  - c) DNA surrounded by the nuclear membrane
  - d) two or more DNA molecules
  
2. Cytoplasmic structures not present in bacteria are :
  - a) ribosomes
  - b) endoplasmic reticulum
  - c) RNA
  - d) DNA
  
3. Critical for the survival of bacteria is :
  - a) capsule
  - b) pili
  - c) cell wall
  - d) flagellum
  
4. Only Gram-negative bacteria contain:
  - a) exotoxins
  - b) peptidoglycan
  - c) lipopolysaccharidae
  - d) plasmids
  
5. Which of the following is the most important structure related with microbial attachment to cells?:
  - a) flagellum
  - b) plasmid
  - c) peptidoglycan
  - d) glycocalix
  
6. Virulence genes in pathogenic bacteria are:
  - a) always expressed constitutively
  - b) always on the chromosome
  - c) able to be transferred to other species
  - d) a + b
  
7. Resistance to betalactam antibiotics can be acquired by:
  - a) decreasing permeability
  - b) acquisition of a plasmid coding for a betalactamase
  - c) mutations in the PBPs genes
  - d) a + b + c
  
8. Pathogenic bacteria can cause damage to the host tissues by:
  - a) production of exotoxins
  - b) inflammatory response
  - c) endotoxins
  - d) a+b+c
  
9. A healthy individual but with a pathogenic bacteria among the normal flora:
  - a) is suffering from an acute infectious disease
  - b) is a potential origin of infection
  - c) do not produce antibodies against the pathogen
  - d) a pathogen can not be part of the normal flora
  
10. Choose which of the following is not a mechanism of bacterial gene transfer:

- a) conjugation
- b) transformation
- c) transcapsulation
- d) transduction

11. Transduction is mediated by :

- a) bacteriophages
- b) pili
- c) plasmids
- d) Hfr- cells

12. Teichoic acids form part of the structure of:

- a) gram + cytoplasmic membrane
- b) gram – cytoplasmic membrane
- c) gram + cell wall
- d) gram – cell wall

13. Capsules are virulence factors as :

- a) inhibit phagocytosis
- b) are toxic for human cells
- c) inhibit the complement system
- d) contains endotoxins

14. The location of O antigen in Gram – bacteria is :

- a) lipopolysaccharidae
- b) flagellum
- c) pili
- d) capsule

15. The most frequent nosocomial infection is:

- a) bacteremia
- b) urinary tract infection
- c) gastrointestinal tract
- d) wound infection

16. The majority of resistant microorganisms are:

- a) viruses
- b) bacteria
- c) fungi
- d) parasites

17. Virulence genes can be located on:

- a) the chromosome
- b) plasmids
- c) bacteriophages
- d) a + b + c

18. After Gram staining, Gram negative bacteria are :

- a) red
- b) violet
- c) pink
- d) decoloured

19. From the following, indicate which is a self-replicating structure:

- a) plasmids
- b) transposons
- c) integrons
- d) ninguno

20. The target of betalactam antibiotics is:

- a) bacterial ribosome
- b) cell wall
- c) cytoplasmic membrane
- d) DNA

## ANSWERS

- 1: a
- 2: b
- 3: c
- 4: c
- 5: d
- 6: c
- 7: d
- 8: d
- 9: b
- 10: c
- 11: a
- 12: c
- 13: a
- 14: a
- 15: b
- 16: b
- 17: d
- 18: c
- 19: a
- 20: b