

# Lesson (5): Host- parasite relationship

## **1- Endotoxins belong to a class of biological molecules called:**

- a) Mucopolysaccharides
- b) Lipopolysaccharides
- c) Proteins
- d) Peptidoglycans.

## **2- All of the following about exotoxins are true EXCEPT:**

- a) Diffusible
- b) Have specific action
- c) Protein in nature
- d) Highly toxic
- e) Stable at high temperature

## **3- All of the following concern endotoxins EXCEPT:**

- a) Are weakly antigenic
- b) Are converted to toxoid by formalin
- c) Have non-specific action (fever and shock)
- d) Are encoded by gene on the chromosome
- e) Are heat-stable

## **4- Exotoxins belong to a class of biological molecules called:**

- a) Lipopolysaccharides
- b) Nucleic acids
- c) Proteins
- d) Peptidoglycans

## **5- Formaldehyde is added to culture filtrate of C. diphtheriae in order to:**

- a) Increase antigenicity of toxin
- b) Convert toxin to toxoid
- c) Decrease hypersensitivity reactions
- d) None of the above

## **6- Normal flora is best called:**

- a) Commensals
- b) Invasive
- c) Saprophytic
- d) Pathogenic

## **7- One fact is FALSE about exotoxins:**

- a) Usually produced by Gram +ve bacteria
- b) Diffusible
- c) Immunogenic
- d) Heat stable
- e) Specific in action

**8- One fact is TRUE about endotoxins:**

- a) Usually produced by Gram-ve bacteria
- b) Strong immunogenic
- c) Heat labile
- d) Specific in action
- e) Protein in nature

**9- One fact is FALSE about endotoxins:**

- a) Usually produced by Gram –ve bacteria
- b) Produce fever
- c) Can be converted to toxoid
- d) Of chromosomal origin
- e) Polysaccharide in nature

**10- Normal flora cause infection when body defense is impaired is:**

- a) Saprophytic
- b) Opportunistic pathogen
- c) Endoparasites
- d) None of the above

**11- Toxoid is:**

- a) Toxin lost its antigenicity but not toxic
- b) Toxin lost its toxicity but still antigenic
- c) Toxin lost toxicity and antigenicity
- d) None of the above

**12- Spreading factors produced by bacteria are the following EXCEPT:**

- a) Collagenase
- b) IgA protease
- c) Fibrinolysin
- d) Hyaluronidase

**13- Carriers are dangerous source of infection than cases because:**

- a) Not easily detected
- b) Act as a reservoir of infection during epidemics
- c) The isolated organism is more virulent
- d) All of the above

**14- Contagious infectious disease:**

- a) Is the transmission of infection from person to another
- b) Is the process of microbial invasion of the body
- c) Caused by saprophytic organisms
- d) All of the above

**15- Mode of transmission of infection might be by:**

- a) Droplets
- b) Blood
- c) Skin
- d) Animals
- e) All of the above

**16- Koch's postulates include the following EXCEPT:**

- a) The causative organism present in every case of the disease.
- b) The causative organism cannot cause disease in experimental animal.
- c) The causative organism must be isolated in pure culture from every case.
- d) The isolated organism must cause the original disease when inoculated into susceptible animal

**17- The power of bacteria to invade tissues is due to the following EXCEPT:**

- a) Hyaluronidase
- b) Hemolysin
- c) Leukocidin
- d) Flagellae

**18- The following statements concerning exotoxins are correct EXCEPT:**

- a) Exotoxins are polypeptides
- b) Exotoxins are more easily inactivated by heat than are endotoxins
- c) Exotoxins are less toxic than the same amount of endotoxins
- d) Exotoxins can be converted to toxoids

**19- Bacteria in a bacterial biofilm are:**

- a) Non living bacteria.
- b) Protected from host immune mechanisms
- c) Out of reach of antibiotic
- d) b & c
- e) None of the above

**20- The following are considered bacterial virulence factors:**

- a) Capsule
- b) Bacterial biofilm
- c) Pili
- d) a & c
- e) All of the above

**Mark True (T) or False (F) for each of the following statements:**

- 21- Rickettsia, mycoplasma, Chlamydia are prokaryotes.
- 22- Eukaryotes include bacteria, protozoa, and fungi.
- 23- Sulfonamides drugs inhibit the production of essential vitamin, folic acid, in all fungi.
- 24- Penicillin interferes with the synthesis of nucleic acid in bacteria.
- 25- All bacteria must be destroyed because they all cause disease.
- 26- Antibiotics that are effective against many Gram +ve and Gram negative pathogens are known as broad spectrum.
- 27- Fungi are example of eukaryotic microbes.
- 28- Bacteria can reproduce sexually and asexually.
- 29- A spontaneous change in the nucleotide arrangement of DNA molecules within a living cell is called mutation.
- 30- The set of genetic determinants carried by a cell is called the phenotypic, while the observable properties of the cell are called the genotypic.
- 31- When capsules are removed from bacterial cells it affect the viability of the cells.
- 32- Free living organisms that are unable to invade the living body are called saprophytic.