**University of Salahaddin-Erbil Date: 18/12/2022**

**College of Science Time: 2 hours**

**Department of Biology Stage: 4th (General)**

**Medical Bacteriology 2022 - 2023**

**First Semester – First Trial**

**Q1/ Choose the correct answer: (16 Marks)**

1. A substance that binds to IgG and prevents the activation of the complement:

**(IgA protease, Protein A, M protein)**

1. A bacterium that causes mixed infection:

**(*Streptococcus pyogens*, *Streptococcus pneumoniae*, Peptostreptococcus)**

1. The adhesion for Neisseria meningitidis is:

**(Pili, Biofilm, Capsule)**

1. The most important anaerobic fecal flora is:

**(*Escherichia coli, Enterococcus faecalis, Bacteroides fragilis*)**

1. *Listeria monocytogenes* has an enzyme called:

**(Streptolysin O, Streptolysin S, Listeriolysin O)**

1. Tetanus toxin inhibits the release of:

**(Acetylcholine, Inhibitory glycine, Interleukin 1)**

1. A bacterium that produces localized infection:

**(*Clostridium perfringens*, *Clostridium tetani*, *Neisseria meningitidis*)**

1. Opportunistic pathogens are those that cause serious infections in these individuals:

**(Hospitalized patients, Immunocompromised patients, Immunocompetent patients)**

**Q2/**

1. **Compare between the followings: (6 Marks)**
2. Human and bacterial ribosomal protein.
3. Endotoxin and exotoxin according to their toxicity and chemical structure.
4. **Only enumerate: (6 Marks)**
5. Toxins and hemolysins of *Streptococcus pyogens*.
6. Write the (Genus) of three microorganisms which produce antibiotics.

***To be continued ………….***

**Q3/ What are the causative agents (genus and species) and mode of transmission for the following diseases: (ANSWER ONLY FOUR) (10 Marks)**

1. Pneumonia
2. Botulism
3. Ophthalmia neonatorum
4. Diphtheria
5. Wool sorter’s disease

**Q4/ Answer the followings: (ANSWER ONLY FOUR) (12 Marks)**

1. What are the parts of anthrax toxin? Then mention their role in pathogenesis.
2. There are only a few antimicrobial compounds that act on the cell membrane, why? Give an example.
3. What is the mechanism of food poisoning by *Clostridium perfringens*?
4. Define, what is meningococcemia?
5. Describe the clinical findings of scalded skin syndrome disease.

**Good Luck**

**Asst. Professor**

**Daristan J. Ghareb**