

UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
SECOND YEAR FIRST SEMESTER EXAMINATION IN BPharmHons-2020
PHAPM 2144 PHARMACEUTICAL MICROBIOLOGY

Date: 15.06.2022

Time: 03 hours

ANSWER ALL SIX QUESTIONS

1.
 - 1.1. 1.1.1. Name two (02) Gram positive and Gram negative bacteria. (05Marks)
 - 1.1.2. List the main difference between the Gram positive and Gram negative bacteria. (05 Marks)
 - 1.2. Describe the phases of the bacterial growth curve. (20 Marks)
 - 1.3. Explain the mechanisms of initiating a bacterial infection. (40 Marks)
 - 1.4. Name two groups of antibiotics and state their mechanism of action. (10 Marks)
 - 1.5. Briefly describe the agar disc diffusion test. (20 Marks)

2.
 - 2.1. Define the term "Vaccine". (10 Marks)
 - 2.2. List the two types vaccines with an example to each. (10 Marks)
 - 2.3. Write down the factors influence the immune response of vaccination. (20 Marks)
 - 2.4. Explain herd immunity in terms of COVID-19 vaccination. (20 Marks)
 - 2.5. Discuss on type I hypersensitivity reactions to COVID-19 Vaccines. (40 Marks)

3.
 - 3.1. Define
 - 3.1.1. sterilization. (05 Marks)
 - 3.1.2. sterility test. (05 Marks)
 - 3.2. Explain briefly on performing growth promotion test in the above mentioned medias (3.3) before sterility testing. (20 Marks)
 - 3.3. List the commonly used culture media in sterility test. (10 Marks)
 - 3.4. Discuss the moist heat sterilization by autoclave. (30 Marks)
 - 3.5. Describe the sterility validation in pharmaceuticals by membrane filtration method. (30 Marks)

4. Write an account on
 - 4.1. superficial mycoses. (25 Marks)
 - 4.2. chemical disinfectants. (25 Marks)
 - 4.3. innate immunity. (25 Marks)
 - 4.4. rabbit pyrogen test. (25 Marks)

5. Briefly describe the mode of transmission, prevention, and control of the following parasitic diseases
 - 5.1 Malaria (50Marks)
 - 5.2. Ameobiasis (50Marks)

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6.

- 6.1. List the parasitic nematodes which can cause infections in human intestinal system. (30 Marks)
- 6.2. Briefly outline the major clinical consequences of the parasitic infections which you have mentioned in 6.1. (40 Marks)
- 6.3. Describe the prevention and control of the above mentioned parasites in 6.1. (30 Marks)