UNIVERSITY OF JAFFNA, SRI LANKA
FACULTY OF ALLIED HEALTH SCIENCES
SECOND YEAR FIRST SEMESTER EXAMINATION IN BPharmHons-2019
PHAMB 2163 PHARMACEUTICAL MICROBIOLOGY

Date: 11.12.2021   Time: 02 hours

ANSWER ALL SIX QUESTIONS

1.
   1.1 Describe the pharmaceutical ingredients that are susceptible to microbial attack. (50 Marks)
   1.2 List five (05) observable effects of microbial attack on pharmaceutical products. (20 Marks)
   1.3 Write all the stages of manufacturing process that requires quality control of microbial contamination. (30 Marks)

2.
   2.1 Define the following terms:

   2.1.1 sterilization (10 Marks)

   2.1.2 disinfection (10 Marks)

   2.1.3 decontamination (10 Marks)

   2.2 List five (05) factors that affect the efficiency of both disinfection and sterilization. (20 Marks)
   2.3 Describe the dry heat sterilization. (50 Marks)

3.
   3.1 Classify the chemical disinfectants and provide one (01) example to each. (30 Marks)
   3.2 List ten (10) requirements of an ideal disinfectant. (30 Marks)
   3.3 Explain the factors that determine the potency of disinfectants. (40 Marks)

4.
   4.1 Define sterility test. (10 Marks)
   4.2 List the general methods used for sterility testing. (10 Marks)
   4.3 Explain one method of sterility testing which you have mentioned in 4.2. (40 Marks)
   4.4 List five (05) microbes used exclusively for the positive control tests according to USP guidelines. (20 Marks)
   4.5 List the limitations of the sterility test. (20 Marks)

5.
    5.1 Classify suture materials according to their behavior in tissues and provide
        two (02) examples to each.   (20 Marks)
    5.2 Write the difference between the types which you have mentioned in 5.1.   (10 Marks)
    5.3 List the essential properties of suture materials.   (30 Marks)
    5.4 Describe different methods used to sterilize suture materials.   (40 Marks)

6.   Write an Account on
    6.1 Rabbit pyrogen test.   (40 Marks)
    6.2 Air sampling techniques used in environmental monitoring.   (30 Marks)
    6.3 Agar disc diffusion test.   (30 Marks)