

Faculty of Health Sciences
Higher Diploma in Pharmaceutical & Cosmetic Sciences
HD 2153 – Sterile Pharmaceutical & Cosmeceutical Manufacturing
Batch - 01
2nd Year 1st semester
Repeat Examination – Assignment

Date : 07th February 2023
Time : 01.00 p.m. – 04.00 p.m. (Three Hours)

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **THREE** questions.
- Answer **ALL** questions.
- You should write legibly in black or blue ink.
- You are not allowed to take out the examination papers.

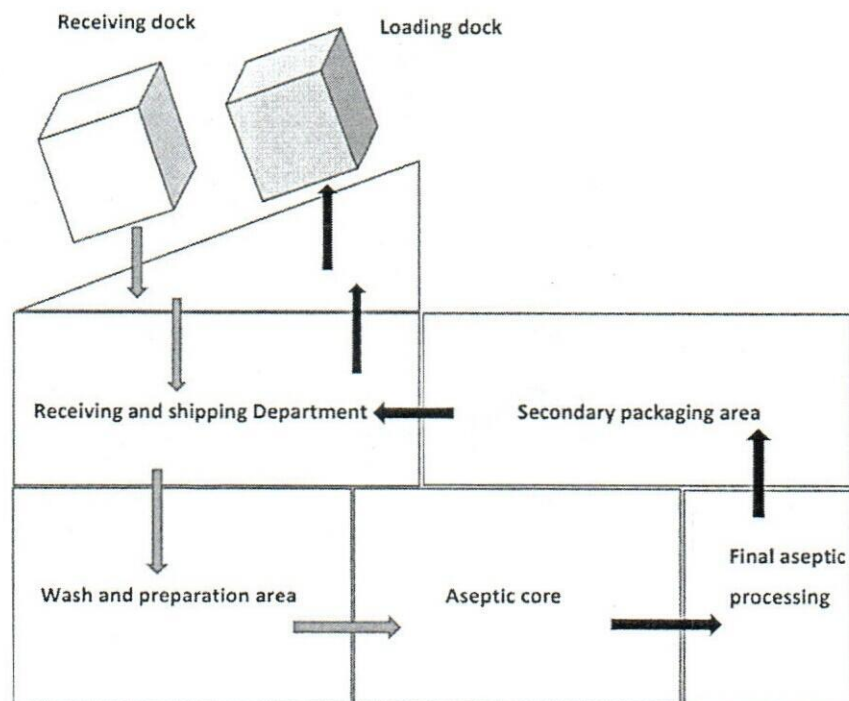
01. **(100 marks)**

1.1. Describe the methods used to minimize the air-borne particles in a pharmaceutical manufacturing company. (50 marks)

1.2. Describe the material flow and personal flow within a pharmaceutical manufacturing company by drawing a diagram. (50 marks)

02. **(100 marks)**

The following figure shows a less desirable layout within a sterile manufacturing facility.



- 2.1. What is the reason for considering this as a less desirable layout? (20 marks)
- 2.2. Draw the correct layout to show the material and product flow within a sterile pharmaceutical manufacturing facility. (80 marks)

03. (100 marks)

- 3.1. Differentiate the sterilization and disinfection. (20 marks)
- 3.2. Usually, aseptic compounding area required Grade D (ISO 8) conditions. Guidelines provided in USP, pharmaceutical compounding of sterile preparations provides guidance on conditions and practices that must be followed to avoid harm to patients from bacterial endotoxins, microbial contamination, chemical and physical contaminants, and ingredients of inappropriate quality.
- 3.2.1 Discuss the most likely sources of microbial contamination in aseptic processing. (30 marks)
- 3.3. Formulation of drugs into injectables required that final product to be sterile. Formulation of injectables can be done in two methods either the entire formulation in manufactured under aseptic area or the final product is sterilized at the end of the process.
- 3.3.1 Briefly describe these **02** methods. (20 marks)
- 3.3.2 Discuss the sterilization methods of ointments, eye drops, and plastic tubes. (30 marks)



Faculty of Health Sciences
Higher Diploma in Pharmaceutical & Cosmetic Sciences

HD 2123
Pathology of Diseases
2nd year 1st Semester

End Semester SEQ Examination- Re-sit

1st Batch

Date : 02nd of February 2023
Time : 9.00 a.m. – 12.00 p.m. (Three hours)

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **SIX** questions.
- Answer **ALL** questions.
- You should write legibly in black or blue ink.
- You are not allowed to take out the examination papers.

- Question 1** (100 marks)
Define the followings.
- 1.1 Hypertrophy (25 marks)
 - 1.2 Hyperplasia (25 marks)
 - 1.3 Atrophy (25 marks)
 - 1.4 Metaplasia (25 marks)
- Question 2** (100 marks)
- 2.1 List cardinal signs of inflammation. (10 marks)
 - 2.2 Compare and contrast the followings with at least 3 features.
 - 2.2.1 acute inflammation and chronic inflammation (30 marks)
 - 2.2.2 Dry gangrene and wet gangrene. (30 marks)
 - 2.2.3 Regeneration & Repair. (30 marks)
- Question 3** (100 marks)
- 3.1 Name 4 types of Cystic Diseases of the Kidneys (20 marks)
 - 3.2 Write a short note on Chronic Kidney Disease (30 marks)
 - 3.3 List the clinical signs and symptoms of Eclampsia (20 marks)
 - 3.4 Define the following disease conditions.
 - 3.4.1 Vaginal candidiasis (15 marks)
 - 3.4.2 Hypospadias (15 marks)

Question 4 (100 marks)

- 4.1 List 5 pathological changes/features in following stages of lobar pneumonia.
 - 4.1.1 Congestion (20 marks)
 - 4.1.2 Red Hepatization (20 marks)
 - 4.1.3 Gray Hepatization. (20 marks)
 - 4.1.4 Stage of Resolution (20 marks)
 - 4.1.5 Emphysema (20 marks)

Question 5 (100 marks)

- 5.1 Briefly describe the followings.
 - 5.1.1 Hydrocephalus (25 marks)
 - 5.1.2 Cerebral Oedema (25 marks)
 - 5.1.3 Schwannoma (25 marks)
 - 5.1.4 Reflux Oesophagitis (25 marks)

Question 6 (100 marks)

- 6.1 Define the term endometriosis (20 marks)
- 6.2 Name the causative agents for following diseases (50 marks)
 - 6.2.1 Genital warts
 - 6.2.2 Gonorrhoea
 - 6.2.3 Syphilis
 - 6.2.4 AIDS
 - 6.2.5 Genital Herpes
- 6.3 Briefly describe the condition named scoliosis with its symptoms (30 marks)