



Faculty of Health Sciences
Higher Diploma in Pharmaceutical and Cosmetic Sciences

HD 1253
Dermatology
1st year 2nd Semester
End Semester SEQ Examination
2nd Batch

Date : 21st February 2024
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.

- Question 1** (100 marks)
- 1.1 List main cell layers present in thick skin. (20 marks)
- 1.2 Describe characteristic features of each layers you mentioned in 1.2 (30 marks)
- 1.3 Write short notes on followings.
- 1.3.1 Dry skin (25 marks)
- 1.3.2 Oily skin (25 marks)
- Question 2** (100 marks)
- 2.1 Describe the anatomy of human hair (35 marks)
- 2.2 Describe haircare tips. (35 marks)
- 2.3 Describe the following stages which are part of hair life cycle.
- 2.3.1 Anagan (15 marks)
- 2.3.2 Catagen (15 marks)
- Question 3** (100 marks)
- 3.1 Describe the structure of sebaceous glands. (30 marks)
- 3.2 Write short notes on followings.
- 3.2.1 Apocrine sweat gland (25 marks)
- 3.2.2 Eccrine sweat gland (25 marks)
- 3.3 Briefly describe arector pili muscle. (20 marks)

Question 4**(100 marks)**

4.1 Describe following functions of human skin.

4.1.1 Protection

(25 marks)

4.1.2 Thermoregulation

(25 marks)

4.1.3 Cutaneous sensation

(25 marks)

4.1.4 Vitamin D Synthesis

(25 marks)

Question 5**(100 marks)**

5.1 Describe the functions of nails.

(30 marks)

5.2 Describe what can you do for nail cuticle caring.

(40 marks)

5.3 Write a short note on Dermal filler.

(30 marks)

Question 6**(100 marks)**

6.1 List four principle cells present in the epidermis.

(20 marks)

6.2 What are the dermal papillae?

(25 marks)

6.3 What are the two primary forms of Melanin.

(20 marks)

6.4 Describe the functions of melanocytes.

(35 marks)



Faculty of Health Sciences
Higher Diploma in Pharmaceutical and Cosmetic Sciences
HD PCS 1243 Pharmacology
Batch- 02 -1st year 2nd Semester- End Semester SEQ Examination

Date : 19th February 2024

Time : 09.00 am – 12.00 pm (Three Hours)

Instructions to candidates

- This question paper consists of Six SEQ questions.
- Answer ALL questions.
- You should mark the answer legibly in black or blue ink.

Question 1 (100 marks)

Briefly describe,

- 1.1. First pass metabolism (50 marks)
1.2. Half-life of a drug (50 marks)

Question 2 (100 marks)

List the,

- 2.1. Types of adverse drug interactions (40 marks)
2.2. Stages of clinical trials (40 marks)
2.3. Diuretic used in clinical practice (20 marks)

Question 3 (100 marks)

List the drugs used in,

- 3.1. Acute Gastritis (25 marks)
3.2. Acute Bronchitis (35 marks)
3.3. Hypertension (40 marks)

Question 4

What are the drugs used for,

4.1. local anesthesia

4.2. general anesthesia

4.3. vomiting

4.4. epilepsy

(100 marks)

(25 marks)

(25 marks)

(25 marks)

(25 marks)

Question 5

Describe the clinical use of,

5.1. adrenaline

5.2. salbutamol

5.3. prazosin

5.4. prednisolone

(100 marks)

(25 marks)

(25 marks)

(25 marks)

(25 marks)

Question 6

Describe the terms of

6.1. drug toxicity

6.2. contraindications

6.3. first order Kinetics

6.4. drug excretion methods

(100 marks)

(25 marks)

(25 marks)

(25 marks)

(25 marks)



Faculty of Health Sciences
Higher Diploma in Pharmaceutical and Cosmetic Sciences
HD PCS 1243 Pharmacology
Batch- 02-1st year 2nd Semester- End Semester MCQ Examination

Date : 19th February 2024
Time : 01.30 pm – 02.30 pm (One Hour)

Instructions to candidates

- This question paper consists of Twenty MCQ questions.
- Answer ALL questions.
- Out of five statements, some statements are true and some statements are false. Please mark true statement in the row of **True** and mark false statement in the row of **False**.

Ex:

True	a	b	c	d	e
False	a	b	c	d	e

- You should mark the answer legibly in black or blue ink.
1. Uses of estrogen preparation are
 - a. Contraception
 - b. Hair growth
 - c. Breast cancer
 - d. PCOS syndrome
 - e. Treatment of uterine cancer
 2. What is the drug to reduce the pain in myocardial infarction?
 - a. Aspirin
 - b. Heparin
 - c. Morphine
 - d. Paracetamol
 - e. Diclofenac sodium
 3. What is/are the major site of drug metabolism?

- a. Skin
 - b. Intestine
 - c. Blood
 - d. Liver
 - e. Kidney
4. Clinical uses of beta blocker is/are,
- a. tachycardia
 - b. arrhythmia
 - c. migraine
 - d. uterine bleeding
 - e. alopecia
5. What is teratogenicity?
- a. placental crossing of drugs
 - b. drug secretion to the breast milk
 - c. drug induced fetal damage during pregnancy.
 - d. mothers' illness due to drug toxicity
 - e. none of the above
6. Which of the following drug will relieve the pain in Angina Pectoris?
- a. Aspirin
 - b. Clopidogrel
 - c. Beta blockers
 - d. Calcium Channel blockers
 - e. Nitrate sublingual
7. Regarding warfarin,
- a. can cause bleeding with overdose.
 - b. shows immediate therapeutic action.
 - c. use orally
 - d. monitored with INR
 - e. act on clotting factors
8. Adrenaline
- a. is sympathomimetics.
 - b. act on beta receptors
 - c. act on alpha receptors
 - d. can cause tachycardia.
 - e. can increase blood pressure.

9. Local anesthetics are,
- Propofol
 - Ketamine
 - Lignocaine
 - Procaine
 - Mepivacaine
10. ADME
- is the pharmacodynamics process
 - can vary with the person.
 - does not vary with age.
 - process will not be changed in pregnancy.
 - will not interfere with drug level.
11. Adverse drug reactions
- are always unpleasant
 - are always predictable.
 - occur at therapeutic dose level
 - of type B is bizarre reactions
 - type F will end the treatment
12. Drug reactions
- can occur outside the body
 - are always beneficial
 - do not occur at absorptive level
 - can modify the effect of another drug
 - are not dangerous
13. Salbutamol,
- is used for bronchial asthma
 - acts on alpha receptors
 - can cause bradycardia
 - is a sympathomimetic
 - not available for inhalation
14. Drugs used in gastric ulcer is/are
- Omeprazole
 - Cimetidine
 - Paracetamol
 - Phenytoin
 - Antacids

15. Drugs acting on uterus is/are
- Prednisolone
 - Progesterone
 - Oxytocin
 - Domperidone
 - Estrogen
16. Which of the drugs are acting on platelets?
- Warfarin
 - Heparin
 - Aspirin
 - Clopidogrel
 - Streptokinase
17. Which of the following drugs act on sympathetic system?
- Adrenalin
 - Atropine
 - Salbutamol
 - Propranolol
 - Domperidone
 - f.
18. Which of the drugs are beta blockers?
- Propranolol
 - Atenolol
 - Streptokinase
 - Alteplase
 - Acebutolol
19. Which of the drugs are side effects of Beta blockers?
- Bradycardia
 - Heart failure
 - Cardiac block
 - Vomiting
 - Thrombosis
20. Which of the drugs are vasodilators?
- Nitrates
 - Calcium channel blockers
 - Beta blockers
 - Lignocaine
 - Adrenalin

**Faculty of Health Sciences****Higher Diploma in Pharmaceutical & Cosmaceutical Science
Pharmaceutical & Cosmaceutical Microbiology
HD 1233-1st year 2nd Semester – Batch 02
End Semester SEQ Examination**

Date : 16th February 2024
Time : 9.00 am. – 12.00 pm (Three Hours)

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **SIX** questions.
- Answer **ALL** questions.
- You should write legibly in black or blue ink.

QUESTION 01**(100 marks)**

- 1.1. Compare and contrast simple and differential staining with examples. (30 marks)
- 1.2. Mention the stains used for following bacterial staining.
- 1.2.1. Endospore staining (10 marks)
- 1.2.2. Flagella staining (10 marks)
- 1.2.3. Acid-fast staining (10 marks)
- 1.3. Describe the reason for observing the Acid-Fast bacterial cells in red color after Acid-fast staining. (40 marks)

QUESTION 02**(100 marks)**

- 2.1. A researcher wanted to identify the microorganisms present in a water sample taken from a lake. Therefore, he spread 0.1 mL of the water sample on Nutrient Agar medium. He used many laboratory instruments for the above purpose.
- 2.1.1 State whether he had followed “**sterilization**” or “**disinfection**” for each of item mentioned below. (25 marks)
- 2.1.2 Mention the most **appropriate method** that he could use to achieve sterilization /disinfection of each item accordingly.
- 2.1.1. Nutrient Agar medium (10 marks)
- 2.1.2. Petri dishes (10 marks)
- 2.1.3. Working bench (10 marks)
- 2.1.4. Inoculation loop (10 marks)
- 2.1.5. Glass spreader (10 marks)
- 2.2. Mention key differences between sterilization and disinfection in microbiology. (25 marks)

QUESTION 03**(100 marks)**

3.1. State an example for each culture media type indicated below.

- 3.1.1. Enrichment media (10 Marks)
- 3.1.2. Selective media (10 Marks)
- 3.1.3. Differential media (10 Marks)

3.2. Draw the graphical representation and describe on phases of growth in the "bacterial growth curve" (70 Marks)

QUESTION 04**(100 marks)**

4.1 List the different types of viruses. (20 marks)

4.2 Describe the life cycle of virus within a host cell. (40 marks)

4.4 Explain two serological test used for identification of virus. (40 marks)

QUESTION 05**(100 marks)**

5.1 State the three main groups of medically important Gram Positive Bacilli. (20 marks)

5.2 List the sporeformers of the Gram-Positive Bacilli with examples. (30 marks)

5.3. Write short notes on followings.

5.3.1 Antibiotic Sensitivity Test (25 marks)

5.3.2 Molds (25 marks)

QUESTION 06**(100 marks)**

Describe the bacterial morphology, identification characteristics and the diseases caused by following organisms. (100 marks)

6.1 *Neisseria gonorrhoeae* (25 marks)6.2 *Pseudomonas aeruginosa* (25 marks)6.3 *Staphylococcus aureus* (25 marks)6.4 *Escherichia coli* (25 marks)

**Faculty of Health Sciences****Higher Diploma in Pharmaceutical and Cosmetic Sciences****HD 1223 - Pharmaceutical & Cosmeceutical Materials and Dispensing****Batch 02****1st Year 2nd Semester****End Semester Examination - Assignment**

Date : 14th February 2024**Time : 1.30 p.m. - 2.30 p.m. (One hour)**

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **TWO** questions.
- Answer **ALL** the questions.
- Final answers should be given in **lined sheets** legibly in black or blue ink.
- You are allowed to use non-programmable calculators.

Question 01**(100 marks)**

Imagine you are working at a pharmaceutical manufacturing company. One of your orders of raw materials (given below) has been sent to the industrial premises.

- a. 100 containers of paracetamol BP: uniform material from a reliable supplier.
 - b. 1600 containers of lactose BP: uniform material from a recognized supplier.
 - c. 750 containers of maize starch BP: non-uniform material from a not well-known supplier.
 - d. 150 containers of aspirin BP: uniform material from a recognized supplier.
- 1.1 List **two (02)** documents you will generate before receiving the raw materials. (10 marks)
 - 1.2 Sampling requires the use of proper sampling plans. State what sampling plan will you use for each of the above material. (20 marks)
 - 1.3 Calculate the number of samples you will take for testing purposes from the above paracetamol, lactose, and maize starch containers. (30 marks)
 - 1.4 Sampling requires weighing of materials. Describe how you would check whether the weighing balance have enough accuracy and precision, using 1.000 kg standard weight. (40 marks)

Question 02**(100 marks)**

As a personnel working in a pharmaceutical manufacturing company, you will be advised to wear personal protective equipment in order to minimize the contaminations.

- 2.1 Other than personnel source, name **two (02)** other sources of contamination. (10 marks)
- 2.2 "Gloves must be changed if they are heavily contaminated or damaged." Do you agree with this statement? Comment on your answer. (20 marks)
- 2.3 Briefly describe how you would maintain your personnel hygiene as an employee in the pharmaceutical company. (30 marks)
- 2.4 You are concerned about the environmental impact of personal protective equipment (PPE) use. Explain why reusable PPE are better than single-use PPE for the environment. (40 marks)

**Faculty of Health Sciences****Higher Diploma in Pharmaceutical and Cosmetic Sciences****HD 1223 - Pharmaceutical & Cosmeceutical Materials and Dispensing****Batch 02****1st Year 2nd Semester****End Semester Examination - SEQ**

Date : 14th February 2024**Time : 9.00 a.m. - 12.00 p.m. (Three hours)**

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **SIX** questions.
- Answer **ALL** the questions.
- Final answers should be given in **lined sheets** legibly in black or blue ink.

Question 01 (100 marks)

- 1.1 List **two (02)** advantages of proper material handling. (10 marks)
- 1.2 Draw and label a diagram of 'sampling thief'. (20 marks)
- 1.3 Briefly describe **three (03)** types of pharmaceutical materials handled in industry. (30 marks)
- 1.4 Describe the raw materials sampling procedure. (40 marks)

Question 02 (100 marks)

- 2.1 List **two (02)** techniques used in product identity verification analysis. (10 marks)
- 2.2 State the importance of maintaining cleanliness in pharmaceutical industry. (20 marks)
- 2.3 Classify pharmaceutical defects according to the level of severity. (30 marks)
- 2.4 Describe the need of insurance for cosmetic companies. (40 marks)

Question 03 (100 marks)

- 3.1 List **two (02)** types of strategies used in warehouse management. (10 marks)
- 3.2 Briefly describe the term "quarantine of materials". (20 marks)
- 3.3 Describe the importance of stock cards used in warehouse. (30 marks)
- 3.4 Describe why Good Warehousing Practices are required in industry. (40 marks)

Question 04**(100 marks)**

- 4.1 List **two (02)** functions of pharmaceutical containers. (10 marks)
- 4.2 Briefly describe the functions and properties of pallet trucks. (20 marks)
- 4.3 State **five (05)** types of information in a usual Purchase Order document. (30 marks)
- 4.4 Describe different aspects discussed in monthly Supply Review Meeting. (40 marks)

Question 05**(100 marks)**

- 5.1 List **three (03)** details included in a product release label. (15 marks)
- 5.2 State the need of accurate weighing in pharmaceuticals. (15 marks)
- 5.3 Briefly describe different types of weighing scales. (30 marks)
- 5.4 Describe the 'double check & cross check method' in weighing. (40 marks)

Question 06**(100 marks)**

- 6.1 List **three (03)** components of personal protective equipment (PPE). (15 marks)
- 6.2 Define the 'cleanroom' in pharmaceutical industry. (15 marks)
- 6.3 Why is 'personnel' considered as the main source of contamination? Discuss. (30 marks)
- 6.4 Describe the correct donning process of personal protective equipment. (40 marks)
