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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**  
**DPC 1153 Good Manufacturing Practices & Organizational Management**  
**Batch 01 and 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester (Resit) Examination - SEQ**

INDEX NUMBER: .....

Date : 26<sup>th</sup> May 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 on this paper itself.
- Final answers should be given legibly in black or blue ink.

**Question 01**

**(100 marks)**

1.1 What is pharmaceutical drug manufacturing?

**(10 marks)**

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1.2 What is meant by 'Good Manufacturing Practices (GMP)'?

**(20 marks)**

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1.3 State **five (05)** basic principles of GMP.

**(25 marks)**

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1.4 Differentiate GMP and current GMP (cGMP).

(20 marks)

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1.5 Briefly describe GMP guidelines on pharmaceutical facilities and premises.

(25 marks)

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**Question 02**

**(100 marks)**

2.1 List **three (03)** world renowned pharmacopoeia.

(15 marks)

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2.2 Differentiate general monographs and specific monographs.

(25 marks)

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2.3 What are 'quality specifications' in a pharmacopoeia? (20 marks)

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2.4 Briefly describe about 'medicinal fomularies'. (20 marks)

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2.5 List **four (04)** types of contaminations occurred in pharmaceutical industry, giving **one (01)** example for each of the type you listed. (20 marks)

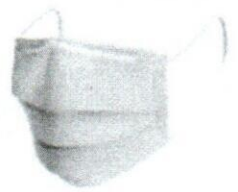
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**Question 03** (100 marks)

3.1 Define what is a clean room. (10 marks)

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3.2 Name the components of Personal Protective Equipment (PPE) given below. (15 marks)



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3.3 Briefly describe the importance of High Efficient Particulate Air (HEPA) filters in clean room facility of a pharmaceutical manufacturing plant. (25 marks)

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3.4 State **five (05)** reasons to maintain personal hygiene during manufacturing. (25 marks)

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3.5 List **five (05)** measures to maintain laboratory discipline. (25 marks)

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**Question 04 (100 marks)**

4.1 Define the term "Management". (15 marks)

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4.2 List the major **four (04)** functions of management. (20 marks)

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4.3 Briefly describe the term ‘performance management’. (20 marks)

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4.4 Name **four (04)** competency evaluation tools. (20 marks)

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4.5 List **five (05)** steps in goals setting process in an organization. (25 marks)

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**Question 05** (100 marks)

5.1 State **three (03)** continuous process improvements techniques. (15 marks)

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5.2 List **four (04)** ways to improve a process. (20 marks)

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5.3 What is meant by 'performance appraisal'?

(20 marks)

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5.4 State **four (04)** performance appraisal methods.

(20 marks)

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5.5 Briefly describe the advantages of forecasting.

(25 marks)

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**Question 06**

**(100 marks)**

6.1 What are the **three (03)** types of code of ethics?

(15 marks)

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6.2 Differentiate goals and plans.

(25 marks)

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6.3 List **five (05)** characteristics of a successful goal. (25 marks)

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6.4 State **one (01)** example for different types of plans based on; (15 marks)

- 6.4.1 Breadth - .....
- 6.4.2 Time frame - .....
- 6.4.3 Specificity - .....

6.5 Briefly describe different time management techniques. (20 marks)

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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**  
**DPC 1153 Good Manufacturing Practices & Organizational Management**  
**Batch 01 and 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester (Resit) Examination - Assignment**

---

**Date : 26<sup>th</sup> May 2024**

**Time : 1.00 p.m. - 2.00 p.m. (One hour)**

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**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.

**Question 01**

**(100 marks)**

Suppose you are going to start a sterile pharmaceutical manufacturing plant which produces vaccines and injections. You and your managing team are planning to implement Good Manufacturing Practices guidelines given by the World Health Organization (WHO).

- 1.1 State the main areas you are going to consider in GMP. (20 marks)
- 1.2 Briefly describe the guidelines which you are going to implement when,
  - 1.1.1 Designing the warehouse (20 marks)
  - 1.1.2 Designing Quality Control laboratory (20 marks)
- 1.3 Describe how you will apply concepts of cleanroom technology to plan manufacturing plant facility, specially the sterile production area. (40 marks)

**Question 02**

**(100 marks)**

- 2.1 "Planning and control is important to successfully manage a pharmaceutical and cosmeceutical manufacturing facility". Briefly describe this statement. (30 marks)
- 2.2 List **five (05)** manufacturing performance indicators that are used to identify the effectiveness of manufacturing planning and control. (30 marks)
- 2.3 Describe the steps of PDCA cycle applying it to a work situation you selected. (40 marks)

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**Faculty of Health Sciences**

**Diploma in Pharmaceutical & Cosmetic Sciences**

**Pharmaceutical Microbiology - DPC 1233**

1<sup>st</sup> YEAR 2<sup>nd</sup> SEMESTER – REPEAT EXAMINATION SEQ -BATCH 01 & 02

Date : 2024-06-09  
Time : 09.00 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 Differentiate simple and differential staining methods. (25 marks)

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1.2 State the methods of smear fixation. (25 marks)

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1.3 Briefly describe types of stains based on the nature of chromogen. (25 marks)

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1.4 Compare the structures of gram-positive and gram-negative cell wall. (25 marks)

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**Question 02 (100 marks)**

2.1 Define the term of culture medium. (25 marks)

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2.2 Briefly describe different types of culture media depending on consistency and ingredients of medium. (25 marks)

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2.3 Briefly describe minimum inhibitory concentration (MIC) (25 marks)

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2.4 Mention the steps of performing Kirby-Bauer disk diffusion susceptibility test. (25 marks)

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**Question 03 (100 marks)**

3.1 Define the term of magnification. (25 marks)

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3.2 Differentiate the magnification and resolution. (25 marks)

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3.3 Mention the parts of optical microscope and explain the light pathway. (25 marks)

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3.4 Briefly describe the mechanism of electron microscope including the differences between transmission electron microscope (TEM) and scanning electron microscope (SEM). (25 marks)

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**Question 04 (100 marks)**

4.1 Define the term of chromosomal DNA. (25 marks)

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4.2 Briefly outline the structure of plasmid. (25 marks)

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4.3 Briefly describe the differences between transformation, transduction, and conjugation of bacterial DNA. (25 marks)

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4.4 Briefly outline the life cycle of viruses. (25 marks)

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**Question 05 (100 marks)**

5.1 State the types of asexual reproduction of microbes. (25 marks)

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5.2 Classify the types of microbial culture methods. (25 marks)

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5.3 Briefly describe the stages of a growth curve. (25 marks)

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5.4 State the types of growth factors required for the growth of microbes in a culture media. (25 marks)

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**Question 06**

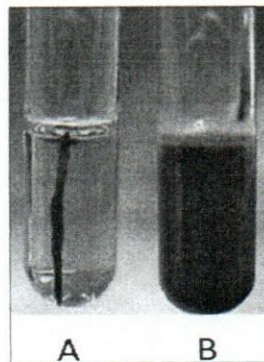
**(100 marks)**

6.1 Define the term of antibiotic susceptibility.

**(25 marks)**

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6.2 Identify the following results of motility test and describe the characters of the microorganisms in tube A & B. **(25 marks)**



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6.3 State the factors that weakens host defense system and increase the susceptibility of infection. **(25 marks)**

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6.4 Briefly describe the process of development in microbial infection within a host. **(25 marks)**

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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**  
**DPC 1223 Pharmaceutical Materials and Dispensing**  
**Batch 01 and 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester (Resit) Examination - Assignment**

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**Date : 02<sup>nd</sup> June 2024**

**Time : 1.00 p.m. - 2.00 p.m. (One hour)**

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**INSTRUCTIONS TO CANDIDATES**

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

**Question 01**

**(100 marks)**

Upon receiving a one batch raw materials from a trusted supplier, Quality Control (QC) department discovered an issue between the received materials and the documentation. Subsequent tests revealed microbial contamination in a portion of the received materials in quarantine.

- 1.1 What is the main function of QC department in a manufacturing plant? (10 marks)
- 1.2 Briefly describe the steps you would follow to receive these materials properly. (20 marks)
- 1.3 Discuss the **importance** of quarantine procedures in this situation. (30 marks)
- 1.4 Describe **two (02)** other types of defects you would observe in raw materials. (40 marks)

**Question 02**

**(100 marks)**

During a routine inspection, you observed that some workers in tablet manufacturing section were not wearing proper Personal Protective Equipment (PPE) while handling powders.

- 2.1 List different components of PPE needed during tablet manufacture. (20 marks)
- 2.2 State the importance of wearing each of the above-listed PPE components. (20 marks)
- 2.3 Describe the donning order of PPE. (25 marks)
- 2.4 Briefly describe the advantage of using recyclable PPE kits in industry. (35 marks)

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**Faculty of Health Sciences**

**Diploma in Pharmaceutical and Cosmetic Sciences  
DPC 1223 Pharmaceutical Materials and Dispensing**

**Batch 01 and 02**

**1<sup>st</sup> Year 2<sup>nd</sup> Semester**

**End Semester (Resit) Examination - SEQ**

**INDEX NUMBER:** .....

**Date : 02<sup>nd</sup> June 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 legibly in black or blue ink.

**Question 01** **(100 marks)**

1.1 State **two (02)** advantages of proper material handling. **(10 marks)**

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1.2 Briefly describe the following techniques used for material identity verification.

1.2.1 Fourier Transform Infrared Spectroscopy (FT-IR) **(20 marks)**

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1.2.2 Raman Spectroscopy **(20 marks)**

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1.3 What is raw material identification?

(25 marks)

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1.4 Briefly describe the main steps in raw materials sampling procedure.

(25 marks)

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**Question 02**

**(100 marks)**

2.1 List **two (02)** methods to reduce warehouse defects.

(10 marks)

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2.2 It is important for pharmaceutical companies to have a good insurance policy.

2.2.1 Name **two (02)** main areas covered by insurance.

(10 marks)

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2.2.2 State **two (02)** types of insurance found in industry.

(10 marks)

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2.3 State the importance of maintaining cleanliness in industry.

(20 marks)

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2.4 "Pharmaceutical industry is a litigious industry". Briefly describe this statement. (25 marks)

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2.5 Briefly describe the biological defects occurred to pharmaceuticals. (25 marks)

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**Question 03** (100 marks)

3.1 List **three (03)** types of samples taken for testing (15 marks)

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3.2 List **three (03)** types of tools used for sampling of raw materials. (15 marks)

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3.3 Briefly describe the term “sampling plan”.

(20 marks)

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3.4 Quarantine of materials is an essential stage of pharmaceutical and cosmeceutical manufacturing.

What is meant by “quarantine of materials” in the above statement?

(25 marks)

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3.5 State the importance of monitoring temperature inside a warehouse.

(25 marks)

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**Question 04**

**(100 marks)**

4.1 List **four (04)** meetings of the monthly meeting cadence.

(20 marks)

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4.2 Purchase order is an essential document in material requisition.

4.4.1 What is the importance of purchase order? (10 marks)

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4.4.2 List **five (05)** main information provided in a purchase order. (25 marks)

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4.3 List **four (04)** WHO guidelines for pharmaceutical storage area. (20 marks)

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4.4 Briefly describe the FEFO method of warehouse management. (25 marks)

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**Question 05** (100 marks)

5.1 Briefly describe Kanban system. (15 marks)

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5.2 List **four (04)** areas covered by enterprise resource planning (ERP). (20 marks)

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5.3 State the functions of pharmaceutical containers. (20 marks)

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5.4 Name the following equipment. (2 x 10 marks)



A



B

A - .....

B - .....

5.5 Briefly describe the principle of pneumatic conveyors. (25 marks)

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**Question 06 (100 marks)**

6.1 List **four (04)** components included in personal protective equipment (PPE). (20 marks)

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6.2 State **three (03)** information included in a product release label. (15 marks)

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6.3 State the steps of double and cross-check method of weighing. (25 marks)

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6.4 Name and briefly describe the properties of following weighing scales types. (2 x 20 marks)

Figure A:



A

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Figure B:



B

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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**  
**DPC 1253**  
**Dermatology**  
**1<sup>st</sup> year 2<sup>nd</sup> Semester**  
**Special Repeat Examination- SEQ Examination**  
**1<sup>st</sup> Batch & 2<sup>nd</sup> Batch**

Date : 1<sup>st</sup> June 2024  
Time : ~~9:00 a.m. - 12:00 p.m.~~ <sup>1:30 p.m. - 4:30 p.m.</sup> (Three hours)

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**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 Illustrate the anatomy of human skin by using a labeled diagram.

**(25 marks)**



1.2 List **five (05)** causes which make oily skin.

(25 marks)

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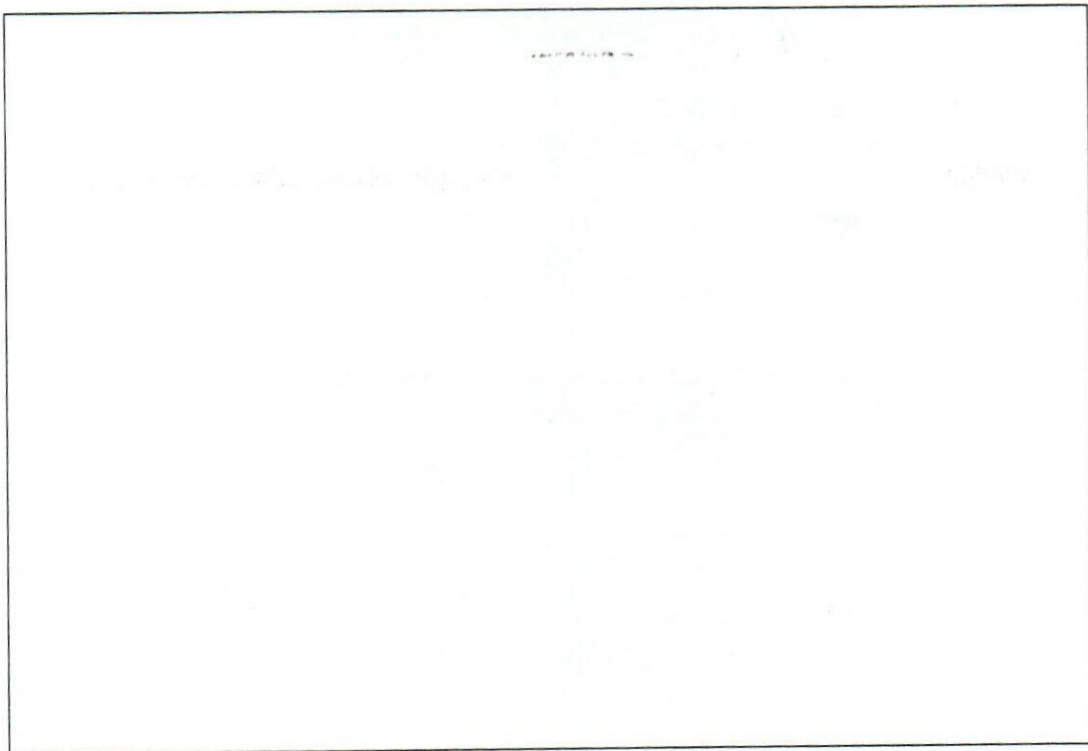
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1.3 Illustrate a "Combination skin" on face by a labeled diagram.

(25 marks)



1.4 Define skin lesion.

(25 marks)

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**Question 2**

**(100 marks)**

2.1 List **four (04)** principle cells present in the epidermis.

**(25 marks)**

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2.2 What are the dermal papillae?

**(25 marks)**

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2.3 What are the two primary forms of Melanin.

**(25 marks)**

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2.4 List functions of melanocytes.

**(25 marks)**

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**Question 3**

**(100 marks)**

3.1 Compare eccrine and apocrine sweat glands.

(50 marks)

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3.2 List **three (03)** places where apocrine glands are widely distributed.

(30 marks)

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3.3 List common characters of dry skin.

(20 marks)

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**Question 4**

**(100 marks)**

4.1 List **five (05)** functions of nails.

**(40 marks)**

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4.2 What can you do for nail cuticle caring?

**(30 marks)**

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4.3 List **three (03)** main elements present in tooth.

**(30 marks)**

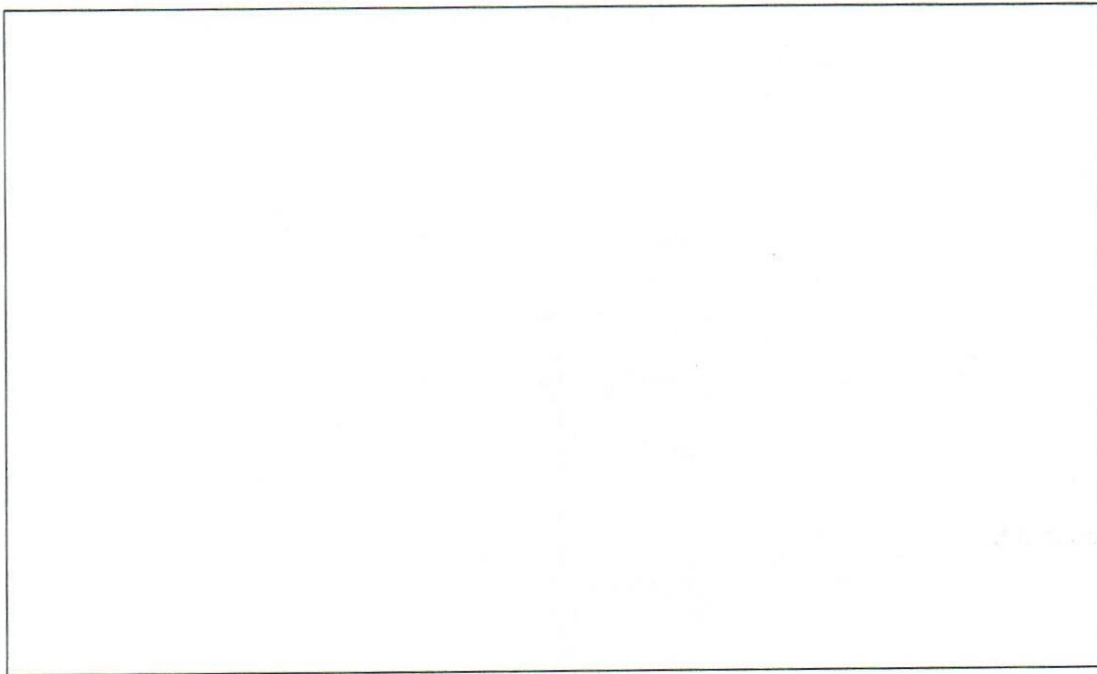
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**Question 5**

**(100 marks)**

5.1 Illustrate main anatomical components of human hair by using a labeled diagram.

**(25 marks)**



5.2 List **five (05)** haircare tips.

**(25 marks)**

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5.3 Write **five (05)** qualities of ideal haircare products.

**(25 marks)**

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5.4 Define anagen stages which are part of hair life cycle. (25 marks)

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**Question 6** (100 marks)

6.1 List five (05) acne scaring treatments. (20 marks)

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6.2 How vitamin C important for skin? (20 marks)

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6.3 Write main role of following cell types regarding cell cycle.  
6.3.1 Labile cells (20 marks)

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6.3.2 Stable cells

(20 marks)

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6.3.3 Permanent cells

(20 marks)

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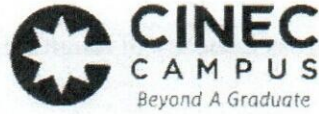
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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical & Cosmetic Sciences**

**DPC 1213**  
**Anatomy & Physiology II**  
**1<sup>st</sup> year 2<sup>nd</sup> Semester**

**Special Repeat Examination- SEQ Examination**  
**1<sup>st</sup> Batch & 2<sup>nd</sup> Batch**

---

**Date** : 1<sup>st</sup> June 2024  
**Time** : 9.00 a.m. – 12.00 p.m. (Three hours)

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**INSTRUCTIONS TO CANDIDATES**

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

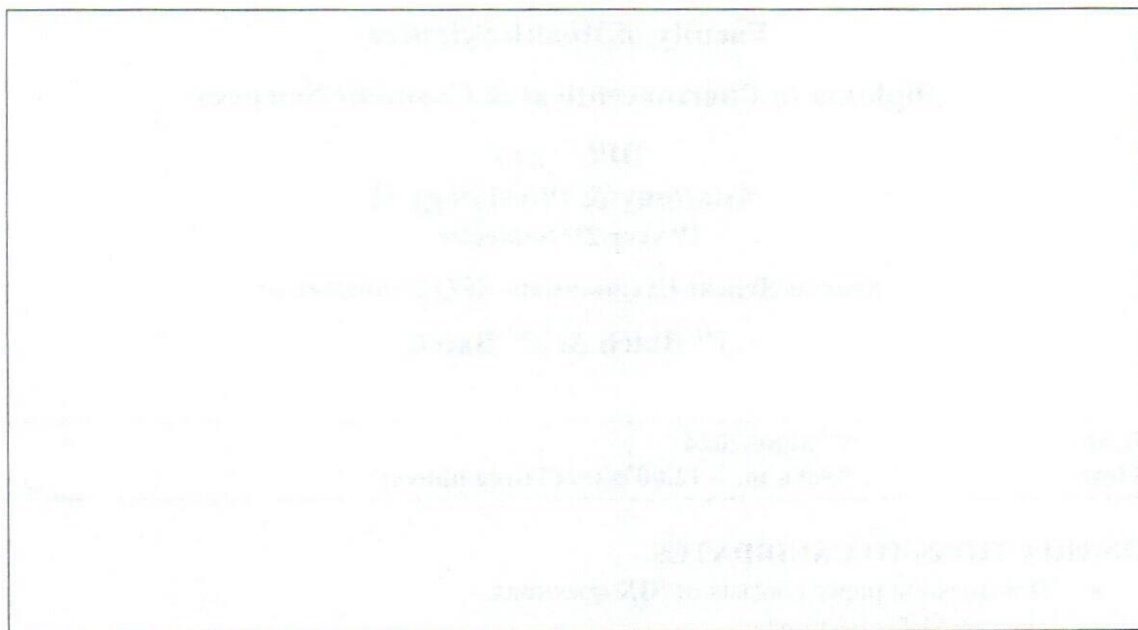
**Question 1** (100 marks)

1.1 Name the microscopic structural and functional unit of human kidney. (20 marks)

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1.2 Draw a label diagram of a unit you mentioned in section 1.1. (25 marks)

1.3 Draw a label diagram to show gross anatomy of longitudinal section of kidney. (30 marks)



1.4 List the constituents in the glomerular filtrate. (25 marks)

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**Question 2** (100 marks)

2.1 Write short notes on followings. (30 marks)  
2.1.1 Corpus luteum

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2.1.2 Corpus luteum (30 marks)

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2.2 What is the site of spermatogenesis in the testes? (20 marks)

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2.3 Define the process of spermatogenesis. (20 marks)

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**Question 3** (100 marks)

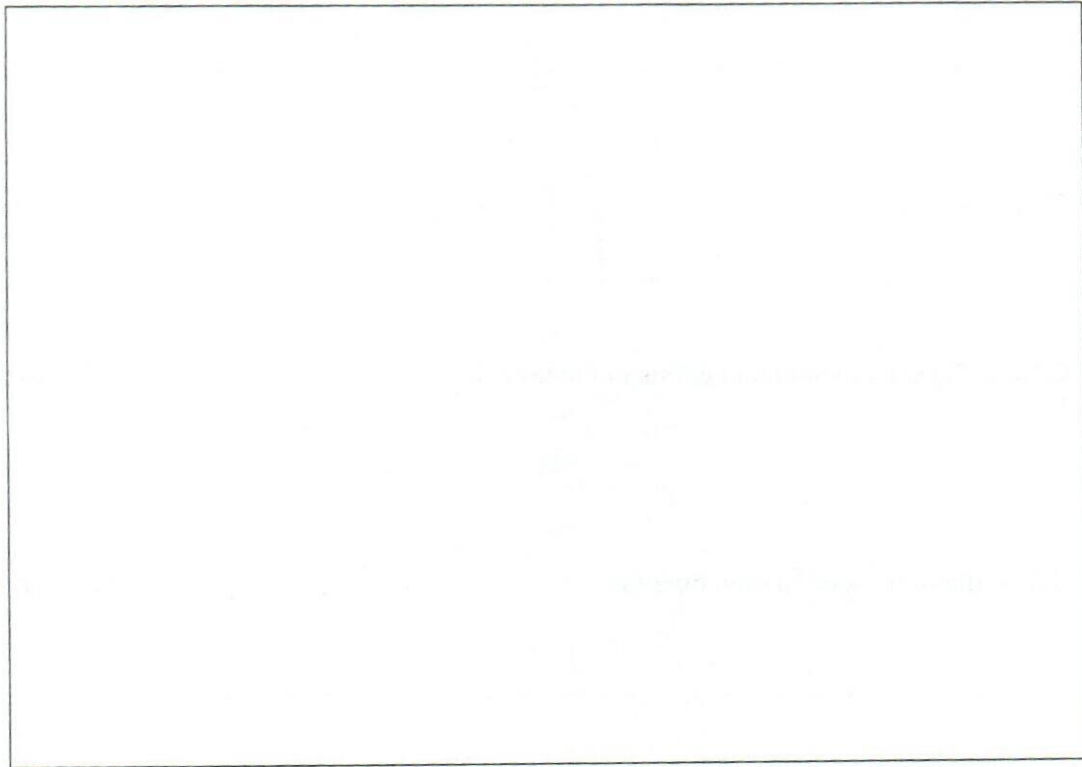
3.1 Name the three layers of meninges. (20 marks)

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3.2 Name structural and functional main unit of nervous system. (10 marks)

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3.3 Illustrate the structure you mentioned in section 3.2, by using a label diagram. (30 marks)



3.4 What is resting membrane potential (RMP)? (40 marks)

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**Question 4**

**(100 marks)**

4.1 Name the functional unit of thyroid gland.

**(20 marks)**

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4.2 "Pancreas belongs to both exocrine and endocrine glands." Comment on this statement.

**(25 marks)**

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4.3 Write a description on anatomy of thyroid gland.

**(55 marks)**

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**Question 5**

**(100 marks)**

5.1 Outline the functions of the skin.

**(25 marks)**

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5.2 List the main contractile proteins in skeletal muscle

**(25 marks)**

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5.3 List the main types of joints based on their structural differences giving example for each type.

**(25 marks)**

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5.4 List the main components of a synovial joint.

**(25 marks)**

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**Question 6**

**(100 marks)**

6.1 Name primary and secondary immune organs present in human body.

**(20 marks)**

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6.2 Compare skeletal muscles, cardiac muscles and smooth muscles.

**(30 marks)**

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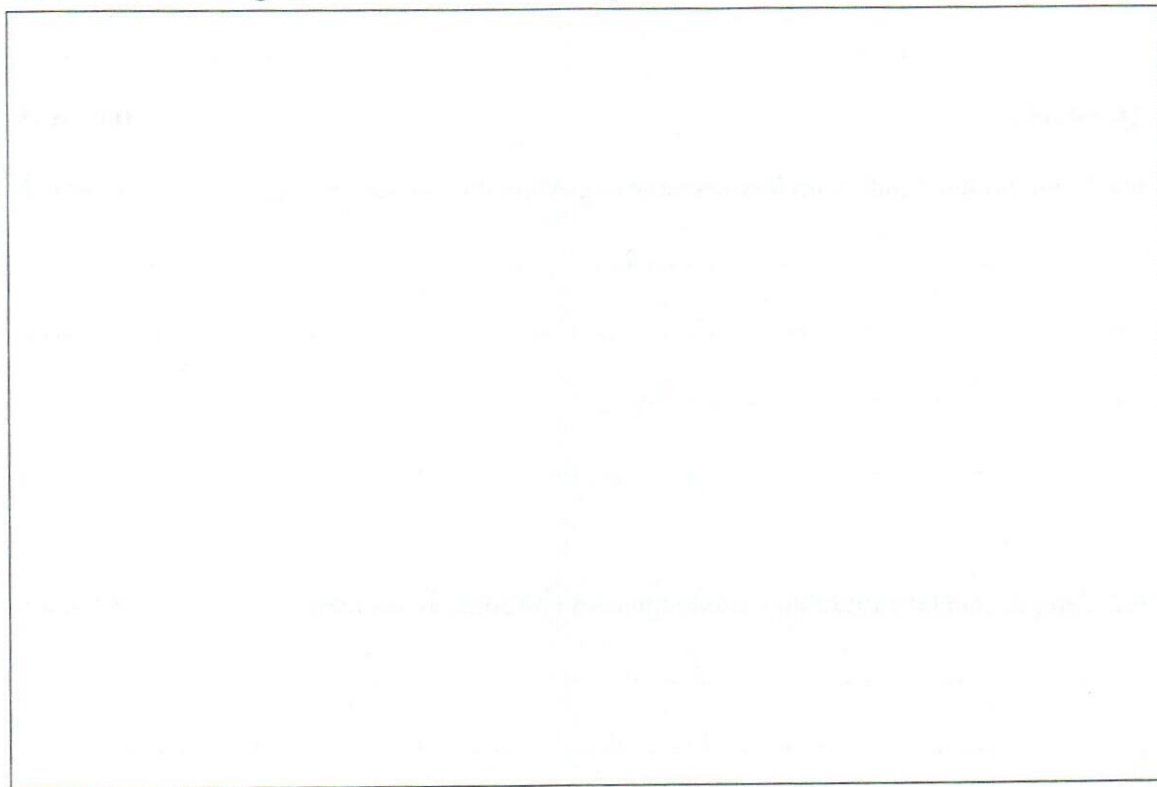
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6.3 Draw a label diagram of a section of human eye.

(25 marks)



6.4 Outline process in main stages of action potential of a neuron.

(25 marks)

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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical & Cosmetic Sciences**  
**Pharmaceutical Microbiology - DPC 1233**  
**1<sup>st</sup> YEAR 2<sup>nd</sup> SEMESTER - END EXAMINATION SEQ -BATCH 02**

Date : 20.12.2023  
 Time : 09.00 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 Mention the parts of optical microscope and explain the light pathway. (30 marks)
- 1.2 Differentiate magnification and resolution. (30 marks)
- 1.3 State the mechanism of the below optical microscopes.
- 1.3.1 Dark bright field microscope (10 marks)
- 1.3.2 Bright field microscope (10 marks)
- 1.3.3 Phase contrast microscope (10 marks)
- 1.3.4 Fluorescent microscope (10 marks)
- Question 02** **(100 marks)**
- 2.1 Define the culture medium? (10 marks)
- 2.2 Describe different types of culture media depending on consistency and ingredients of medium. (30 marks)
- 2.3 Briefly explain minimum inhibitory concentration (MIC). (15 marks)
- 2.4 Mention the steps followed when performing Kirby-Bauer Disk Diffusion Susceptibility Test. (25 marks)
- 2.5 Differentiate E-test and disc diffusion method. (20 marks)
- Question 03** **(100 marks)**
- 3.1 Define Generation time in prokaryotes. (20 marks)
- 3.2 Describe different stages of a growth curve. (20 marks)

3.3 Mention the purpose of culture methods. (20 marks)

3.4 Differentiate facultative anaerobes & aerotolerant anaerobes (40 marks)

**Question 04 (100 marks)**

4.1 Compare the structures of gram positive and gram-negative cell wall. (20 marks)

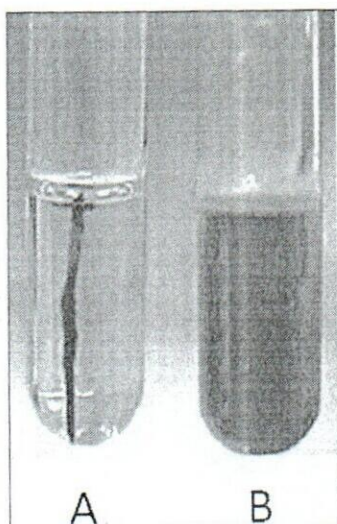
4.2 State the methods of smear fixation. (20 marks)

4.3 Describe the steps of gram stain technique in relation to cell wall of the microorganism. (30 marks)

4.4 Describe types of stains based on the nature of chromogen. (30 marks)

**Question 05 (100 marks)**

5.1 Identify the following results of motility test and describe the characters of the microorganisms in tube A & B. (40 marks)



5.2 State the factors that weakens host defence system and increase the susceptibility of infection. (30 marks)

5.3 Describe the process of development of microbial infection within a host. (30 marks)

**Question 06 (100 marks)**

6.1 Mention different methods of transmission of viruses with examples. (25 marks)

6.2 Describe the pathogenesis, complication of *Varicella zoster*. (30 marks)

6.3 Describe the viral replication within a host cell. (35 marks)

6.4 State the diagnosis test used for viruses. (10 marks)



**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**

**DPC 1243 Pharmacology**  
**Batch – 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester SEQ Examination**

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**Date** : 09<sup>th</sup> of December 2023  
**Time** : 09.00 am – 12.00 pm (Three Hours)

**INSTRUCTIONS TO CANDIDATES**

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

<b>Question 01</b> Briefly describe, 1.1. First pass metabolism 1.2. Half-life of a drug	<b>(100 marks)</b>  (50 marks) (50 marks)
<b>Question 02</b> List the, 2.1. types of adverse drug interactions 2.2. stages of clinical trials 2.3. diuretic used in clinical practice	<b>(100 marks)</b>  (40 marks) (40 marks) (20 marks)
<b>Question 03</b> List the drugs used in, 3.1. Acute gastritis 3.2. Acute bronchitis 3.3. Hypertension	<b>(100 marks)</b>  (25 marks) (35 marks) (40 marks)



**Question 04**

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 05**

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 06**

Explain 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**  
**Diploma in Pharmaceutical & Cosmetic Sciences**

**DPC 1213**  
**Anatomy & Physiology II**  
**1<sup>st</sup> year 2<sup>nd</sup> Semester**  
**End Semester SEQ Examination**  
**2<sup>nd</sup> Batch**

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**Date** : 6<sup>th</sup> December 2023  
**Time** : 9.00 a.m. – 12.00 p.m. (Three hours)

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**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 Draw a label diagram of a nephron. (25 marks)
- 1.2 Write short note on gross anatomy of longitudinal section of kidney. (25 marks)
- 1.3 List the constituents in the glomerular filtrate. (15 marks)
- 1.4 Describe the process of urine formation. (35 marks)
- Question 2** **(100 marks)**
- 2.1 Name the three layers of meninges. (15 marks)
- 2.2 Describe the structure of a neuron. (35 marks)
- 2.3 What is resting membrane potential (RMP)? (20 marks)
- 2.4 Name the main three (03) components of synapse (15 marks)
- 2.5 Write **three (03)** factors determine the speed of nerve conduction. (15 marks)
- Question 3** **(100 marks)**
- 3.1 Write short notes on followings.
- 3.1.1 Thyroid gland (25 marks)
- 3.1.2 Endocrine pancreas (25 marks)
- 3.2 List the hormones which are secreted by the anterior pituitary gland. (15 marks)
- 3.3 List the **three (03)** hormones which are secreted by adrenal cortex. (15 marks)
- 3.4 Outline the functions of hormones which mentioned in 3.3 (20 marks)
- Question 4** **(100 marks)**
- 4.1 List the components present in the spermatic cord. (20 marks)

- 4.2 Write short notes on followings.
- 4.2.1 Corpus luteum (20 marks)
  - 4.2.2 Corpus luteum (20 marks)
- 4.3 List the functions of the following structures of male reproductive system. (40 marks)
- 4.3.1 Scrotum
  - 4.3.2 Epididymis
  - 4.4.3 Seminal vesicles
  - 4.4.4 Prostate gland

**Question 5 (100 marks)**

- 5.1 Write short notes on followings.
- 5.1.1 Eccrine sweat glands (25 marks)
  - 5.1.2 Tympanic membrane (eardrum) (25 marks)
- 5.2 Outline the functions of the skin. (30 marks)
- 5.3 Name primary and secondary immune organs present in human body. (20 marks)

**Question 6 (100 marks)**

- 6.1 Names all bones in upper limbs. (20 marks)
- 6.2 Compare skeletal muscles, cardiac muscles and smooth muscles. (30 marks)
- 6.3 Name the main contractile proteins in skeletal muscle (20 marks)
- 6.4 Briefly describe the main steps of contraction of skeletal muscle (30 marks)





**Faculty of Health Sciences**  
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**DPC 1243 Pharmacology**  
**Batch - 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester MCQ Examination**

INDEX NUMBER: .....

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Date : 09<sup>th</sup> of December 2023  
Time : 01.00 pm - 02.00 pm (One Hour)

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**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 statements in the row of **True** and mark false statements in the row of **False**.  
Ex:

True	a	<del>b</del>	c	<del>d</del>	e
False	<del>a</del>	b	<del>c</del>	d	<del>e</del>

- You should mark the answer legibly in black or blue ink.
- You are not allowed to take out the examination papers.

1. True

a	b	c	d	e	
False	a	b	c	d	e

2. True  
False

a	b	c	d	e
a	b	c	d	e

3. True  
False

a	b	c	d	e
a	b	c	d	e

4. True  
False

a	b	c	d	e
a	b	c	d	e

5. True  
False

a	b	c	d	e
a	b	c	d	e

6. True  
False

a	b	c	d	e
a	b	c	d	e

7. True  
False

a	b	c	d	e
a	b	c	d	e

8. True  
False

a	b	c	d	e
a	b	c	d	e

9. True  
False

a	b	c	d	e
a	b	c	d	e

10. True  
False

a	b	c	d	e
a	b	c	d	e

11. True  
False

a	b	c	d	e
a	b	c	d	e

12. True

a	b	c	d	e
a	b	c	d	e

False

13. True

a	b	c	d	e
a	b	c	d	e

False

14. True

a	b	c	d	e
a	b	c	d	e

False

15. True

a	b	c	d	e
a	b	c	d	e

False

16. True

a	b	c	d	e
a	b	c	d	e

False

17. True

a	b	c	d	e
a	b	c	d	e

False

18. True

a	b	c	d	e
a	b	c	d	e

False

19. True

a	b	c	d	e
a	b	c	d	e

False

20. True

a	b	c	d	e
a	b	c	d	e

False





**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**  
**DPC 1223 - Pharmaceutical and Cosmeceutical Materials and Dispensing**  
**Batch 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester Examination – Assignment**

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**Date : 02<sup>nd</sup> December 2023**

**Time : 01.30 p.m. to 02.30 p.m.**

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**INSTRUCTIONS TO CANDIDATES**

- This question paper consists of **TWO (02)** questions.
- Answer **ALL** the questions.
- Candidate should answer legibly in black or blue ink.

**Question 01**

**(100 marks)**

Imagine you own a pharmaceutical manufacturing company. One of your orders of raw materials has been received in the morning.

- a. 100 containers of salbutamol
- b. 1600 containers of maize starch

- 1.1 What **two (02)** documents/ receipts will you check/ generate before receiving the raw materials? (10 marks)
- 1.2 Calculate the number of samples you will take for testing purposes from salbutamol and maize starch containers. (20 marks)
- 1.3 Sampling requires the use of sampling plans. State what sampling plan will you use if the materials above are,
  - 1.3.1 uniform materials, from known recognized, reliable supplier with high confidence.
  - 1.3.2 uniform materials, from known recognized supplier.
  - 1.3.3 non-uniform materials, from unknown supplier. (30 marks)
- 1.4 Sampling requires weighing of materials. Explain how you would check whether your weighing balances have accuracy and precision. (40 marks)

**Question 02****(100 marks)**

As personnel working in a pharmaceutical manufacturing company, you are asked to wear personal protective equipment.

2.1 Other than personnel source, name **two (02)** other sources of contamination. (10 marks)

2.2 "Gloves must be changed if heavily contaminated or damaged." Do you agree?  
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 As an employee in a healthcare related field, you are concerned about the environmental impact of personal protective equipment (PPE) use. Explain why reusable PPE are better than single-use PPE for your company. (40 marks)

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**Faculty of Health Sciences**  
**Diploma in Pharmaceutical and Cosmetic Sciences**  
**DPC 1223 - Pharmaceutical and Cosmeceutical Materials and Dispensing**  
**Batch 02**  
**1<sup>st</sup> Year 2<sup>nd</sup> Semester**  
**End Semester Examination - SEQ**

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**Date : 02<sup>nd</sup> December 2023**

**Time : 09.00 a.m. to 12.00 p.m.**

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**INSTRUCTIONS TO CANDIDATES**

- This question paper consists of **SIX (06)** questions.
- Answer **ALL** the questions.
- Candidate should answer 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 the difference between raw material identification and raw material identity verification. (30 marks)
- 1.4 Describe the main steps of sampling process. (40 marks)

**Question 02** **(100 marks)**

- 2.1 List the **four (04)** stages of handling of materials. (10 marks)
- 2.2 State the importance of maintaining cleanliness in pharmaceutical industry. (20 marks)
- 2.3 Briefly describe the classification of defects according to the type of damage and level of severity. (30 marks)
- 2.4 Explain why pharmaceutical companies require insurance. (40 marks)



- Question 03** (100 marks)
- 3.1 List the **three (03)** stages of warehousing. (10 marks)
- 3.2 Explain “stock cards” used in pharmaceutical warehousing. (20 marks)
- 3.3 Briefly describe why Good Warehousing Practices are important. (30 marks)
- 3.4 List the **three (03)** main strategies used for warehouse management and explain **one (01)** of them. (40 marks)

- Question 04** (100 marks)
- 4.1 List **two (02)** meetings from the monthly meeting cadence. (10 marks)
- 4.2 State **one (01)** difference between Goods Received Note and Purchase Order. (20 marks)
- 4.3 Briefly describe Kanban system. (30 marks)
- 4.4 Describe “Enterprise Resource Planning in pharmaceutical industry”. (40 marks)

- Question 05** (100 marks)
- 5.1 List **two (02)** functions of containers in pharmaceutical industry. (10 marks)
- 5.2 State the principle of pneumatic conveyors. (20 marks)
- 5.3 List the **three (03)** types of weighing scales available and briefly describe **one (01)** of them. (30 marks)
- 5.4 Describe the double and cross check method. (40 marks)

- Question 06** (100 marks)
- 6.1 List **two (02)** parts included in the personal protective equipment (PPE). (10 marks)
- 6.2 Define what is a ‘cleanroom’ in pharmaceutical industry. (20 marks)
- 6.3 Why are ‘personnel’ considered as the main source of contamination? (30 marks)
- 6.4 Describe the doffing process. (40 marks)

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