**QP Code: 121006** **Reg. No……**

# First Semester B. Pharm Degree Regular/Supplementary Examinations April 2024
## Human Anatomy and Physiology I
# (2017 Scheme)

**Time: 3 Hours** **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

**Essay** **(2x10=20)**

1. Explain the neat structure of skull bone, their joints and its functions
2. Classify the tissue. Mention the types of connective tissue, their location and functions

**Short Notes** **(7x5=35)**

3. Explain the process of erythropoiesis and mention the role of erythropoietin
4. Neuromuscular junction
5. Functions of parasympathetic nervous system
6. Types of synovial joint
7. Blood groups and their importance.
8. Discuss the details of cell communication
9. Mechanism of coagulation

**Answer Briefly** **(10x2=20)**

10. What are rods and cones
11. Functions of neurons
12. Characteristics features of muscular tissues
13. Blood disorders
14. Homeostasis
15. Name the disorders of vitamin K and iron
16. Heart valves types
17. Classification of bones with example
18. Diseases of the eye
19. Types of cartilage

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**QP Code: 122006** **Reg. No……**

## First Semester B. Pharm Degree Regular/Supplementary Examinations April 2024

## Pharmaceutical Analysis - I

# (2017 Scheme)

**Time: 3 Hours** **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

**Essay** **(2x10=20)**

1. Explain the principle involved in Polarography. Write about Ilkovic equation, construction and working of dropping mercury electrode
2. What are the concept and type of oxidation and reduction titration. Give in detail on three of them

**Short Notes** **(7x5=35)**

3. Write in detail about the preparation & standardization of sulphuric acid.
4. Explain conductometric titrations
5. Co-precipitation and post precipitation
6. Write on calomel electrode and its applications
7. Titration of calcium gluconate
8. Write about estimation of Sodium benzoate by non aqueous titration
9. Explain neutralization titration curves

**Answer Briefly** **(10x2=20)**

10. With example give properties of Aprotic solvents
11. What are masking and demasking agents.
12. Sources of errors.
13. Properties of primary and secondary standards.
14. What is mean by reference and indicator electrodes. Give examples.
15. Differentiate molarity and molality
16. Name the theories of acid-base indicators
17. End point detection of precipitation titrations.
18. Differentiate volhards and modified volhards method
19. Explain the principle of diazotisation titration with one example

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**QP Code: 123006** **Reg. No……**

**First Semester B. Pharm Degree Regular/Supplementary Examinations April 2024**

**Pharmaceutics- I**

# (2017 Scheme)

**Time: 3 Hours** **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

**Essay** **(2x10=20)**

1. Define dosage form. Classify dosage forms with suitable examples
2. What is an emulsion. Explain the stability problems associated with emulsion

**Short Notes** **(7x5=35)**

3. Explain the development of Indian pharmacopoeia first edition 1955
4. Explain physical incompatibility and a method to overcome it, with an example
5. What are throat paints. Explain the formulation of the same with the help of an example
6. Explain the preparation of effervescent granules using an example
7. Discuss the various sources of errors in a prescription. How can these errors be avoided while dispensing a prescription
8. Explain the various techniques used to enhance the solubility of drugs in liquid dosage form
9. Classify different ointment bases with example. Give the ideal properties of an ointment bases

**Answer Briefly** **(10x2=20)**

10. Write short note on eutectic mixtures
11. Calculate proof strength for an elixir containing 35% v/v alcohol
12. Define prescription and posology
13. Write any four important factors affecting the dose selection
14. Write two examples for therapeutic incompatibility
15. What are organoleptic agents and give two examples for each
16. List any two properties of gargles and mouthwashes. Give the name of a gargle and mouthwash used
17. Give any two formulas for calculation of child dose
18. Write short notes on formulation of nasal drops
19. Differentiate between liniment and lotion

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**QP Code: 124006** **Reg. No……**

## First Semester B. Pharm Degree Regular/Supplementary Examinations April 2024

## Pharmaceutical Inorganic Chemistry

# (2017 Scheme)

**Time: 3 Hours** **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw table/diagrams/flow charts wherever necessary***

**Essay** **(2x10=20)**

1. Explain the principle, chemical reaction and apparatus used in the limit test of arsenic.
2. Define antimicrobial agents. Write the mechanism of action of inorganic antimicrobial agents. Add a note on iodine and its preparation.

**Short Notes** **(7x5=35)**

3. Describe the different sources of impurities in pharmaceuticals.
4. Methods of preparation, properties and uses of Boricacid.
5. Explain the preparation, assay and uses of ammonium chloride.
6. Write the preparation of aluminium hydroxide gel and magnesium sulphate.
7. Define expectorants with suitable examples, explain their properties.
8. Explain the properties of alpha, beta and gamma rays.
9. Explain the pharmaceutical application of radioactive substance.

**Answer Briefly** **(10x2=20)**

10. Define antacid with example.
11. Ideal properties of antacid.
12. Reason for administering antacids as combination of antacids.
13. Define buffer capacity.
14. Role of fluoride in dental carries.
15. Write a note on zinc eugenol cement.
16. Define cathartics with examples.
17. Define half life of radioisotopes.
18. Write the preparation of sodium thiosulphate.
19. Write the chemical formula of

    a) Sodium nitrate b) Sodium bicarbonate
    c) Magnesium hydroxide d) Calcium carbonate

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