

QP Code: 121006

Reg. No.....

**First Semester B. Pharm Degree Supplementary Examinations  
March 2023**

**Human Anatomy and Physiology  
(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. Draw neat labeled diagram of cell. Explain the structure and functions of principal organelles.
2. Discuss the structure and functions of sympathetic and parasympathetic nervous system.

**Short Notes**

**(7x5=35)**

3. Explain ABO system of blood grouping.
4. Discuss the physiology of vision.
5. Explain the composition and functions of lymph.
6. Draw neat labeled diagram of heart and its functions.
7. Explain the physiology of skin.
8. Discuss intracellular signaling pathways.
9. Describe the structure of synovial joints.

**Answer Briefly**

**(10x2=20)**

10. Functions of RBC.
11. Define cardiac arrhythmia and Angina pectoris.
12. Draw neat labeled diagram of neuron.
13. Electrocardiogram.
14. Reticulo endothelial system
15. Explain Rh factor and why is it important.
16. Mention the parts of eye.
17. Name the bones of cranium
18. What are neurotransmitters.
19. Normal value of • BP • Hb% • Clotting time • WBC

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QP Code: 122006

Reg. No.....

**First Semester B. Pharm Degree Supplementary Examinations  
March 2023  
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 theories of acid-base indicators.
2. Explain gravimetric analysis. Explain the various steps involved in gravimetric analysis.

**Short Notes**

**(7x5=35)**

3. Define error and explain the types of error.
4. Explain with reaction the standardization of per chloric acid.
5. Masking and demasking agents.
6. List out the various redox titrations. Explain the principle involved in cerimetry.
7. Explain the construction and working of standard hydrogen electrode. Add a note on its advantages and disadvantages.
8. Explain the principle involved in polarography. Give the Ilkovic equation.
9. Explain Mohr's method.

**Answer Briefly**

**(10x2=20)**

10. Define molarity.
11. Define significant figure.
12. What are neutralization titrations
13. What are the precautions to be taken in the preparation of per chloric acid.
14. What are pM indicators. Give examples.
15. Explain co-precipitation.
16. Define oxidizing and reducing agents. Give examples.
17. What are indicator electrodes. Give examples.
18. Define primary standards. Give two examples.
19. Define ligand. Give examples.

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QP Code: 123006

Reg. No.....

**First Semester B.Pharm Degree Supplementary Examinations  
March 2023  
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 and classify the semisolid dosage forms. Explain the mechanisms and factors influencing dermal penetration of drugs. Add a note on the evaluation of ointments.
2. Discuss the merits and demerits of the liquid dosage forms. Write the excipients used for the formulation of liquid dosage forms and explain the solubility enhancing techniques.

**Short Notes**

**(7x5=35)**

3. Enema and its applications.
4. Stability problems in emulsion.
5. Properties of ideal suppositories.
6. Find the concentration of sodium chloride required to render a 1% solution of cocaine hydrochloride iso osmotic with blood plasma. Freezing point of 1%w/v solution of cocaine hydrochloride is  $-0.09^{\circ}\text{C}$  and that of 1%w/v of solution of sodium chloride is  $-0.0576^{\circ}\text{C}$
7. Factors affecting posology.
8. Pharmacopoeia
9. Show the calculation to prepare 500ml of 35%v/v alcohol from 50%v/v and 25% v/v alcoholic solutions.

**Answer Briefly**

**(10x2=20)**

10. Eutectic mixture
11. Differentiate between lotions and liniments.
12. Effervescent powders
13. Use of sodium citrate in calamine lotion.
14. Difference between Avoirdupois system and Apothecary's system
15. Difference between ointments and pastes
16. Physical incompatibility
17. Primary emulsion ratio for emulsion containing fixed oil and volatile oil.
18. Convert the domestic measures into Metric measure
  - One table spoonful • one tumblerful • one dessert spoonful • one drop
19. Translate the Latin terms in to English
  - od • qid • prn • sos.

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QP Code: 124006

Reg. No.....

**First Semester B.Pharm Degree Supplementary Examinations  
March 2023  
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 about physiological acid base balance and oral rehydration salt.
2. Discuss in detail the sources and types of impurities in pharmaceutical substances with suitable examples.

**Short Notes**

**(7x5=35)**

3. Describe the method of preparation and assay of chlorinated lime.
4. Explain the properties of Alpha, Beta and Gamma Rays.
5. Summarize the physiological role of sodium and potassium.
6. Classify antidotes and explain the assay of sodium thiosulphate with reactions.
7. Outline the principle and procedure involved in the assay of hydrogen peroxide.
8. History of Pharmacopoeia
9. Briefly explain about desensitizing agents and zinc eugenol cement.

**Answer Briefly**

**(10x2=20)**

10. Define isotonic solution.
11. Define pH. Mention the pH range for differentiating acid and base.
12. Why citric acid is added in the limit test of iron
13. Define a base with suitable examples.
14. Define acidifier. Give two examples.
15. State any two precautions to be followed while handling radioactive materials.
16. List the reagents used in limit test of arsenic.
17. Define cathartic. Give two examples.
18. Write the molecular formula of sodium bicarbonate and antimony potassium tartarate
19. Write the chemical equation involved and the indicator used in the assay of calcium gluconate.

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