[KV 805] **SEPTEMBER 2009** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer ALL questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Describe the various sources of impurities in pharmaceutical substances.
   b) What is ceriometry? Explain its advantage over other oxidizing agents.
   c) List out various volumetric methods and explain back titration with example.

2. a) What is complexometric titrations. Explain its principle with suitable examples.
   b) Explain the various theories of indicators.
   c) Describe the principle and procedure involved in the limit test for Iron.

II. Write notes on: **(6 x 5 = 30)**

1. What are antacid?
   Classify them with examples.
   Give the method of preparation of any one of them.

2. Explain the role of fluorides as anti caries agent.

3. Define the following terms:
   a) Cathartics.
   b) Disinfectant.
   c) Aantiseptic.
   d) Astringent.
   e) Dentritrices.

4. Write the composition of Ringer's solution. Explain its importance.

5. Describe the principle involved in modified volhard's method with example.

6. Write short notes on pharmaceutical aid.

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[KW 805] **MARCH 2010** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer ALL questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Describe the principle and procedure involved in conducting limit test for arsenic with neat diagram.

   b) List out various volumetric methods. Explain redox titration with suitable example.

   c) What are cathartics? Give examples.
   Give the method of preparation of any one of them.

2. a) What is gravimetric method?
   Explain the various steps involved in it with example.

   b) What is non aqueous titration?
   Explain its principle with suitable example.

   c) What are antimicrobials? List out various official preparation.
   Explain the assay of any one of them.

II. Write notes on: **(6 x 5 = 30)**

1. Write any one method to measure radio activity.
2. Write short notes on masking and demasking agents.
3. What are dentritrices? List out the official compounds.
4. List out various official compounds of iodine.
   Give the principle involved in the assay of weak iodine solution.
5. Give the principle and reaction involved in the preparation of boric acid and magnesium sulphate.
6. Write a note pharmaceutical importance of medicinal gases.

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[KX 805] **SEPTEMBER 2010** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer ALL questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Write in detail the preparation, properties assay, identification test and uses of oxygen.

   b) Write the preparation, acid consuming capacity and assay of aluminium hydroxide gel.

2. a) Write the principle involved in the non aqueous titration.

   b) Preparation and Standardisation of perchloric acid.

   c) Explain the experimental techniques of gravimetric analysis.

II. Write notes on: **(6 x 5 = 30)**

1. Explain the theory of Indicators.
2. Write a note on the preparation assay and uses of Boric acid.
3. Write the Medicinal uses of the following compounds

   a) Potassium Bromide.

   b) Sodium Nitrate.

   c) Ferrous Sulphate.

   d) Carbon dioxide.

   e) Hydrogen Peroxide.

4. Define error and write its types.
5. Write about the Pm indicator used in complexometric titration.
6. Write any five radio pharmaceuticals and their uses.

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[KY 805] **MAY 2011** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008-2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer ALL questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Describe the sources of impurities in pharmaceutical substances.

   b) Explain the principle and procedure involved in the limit test for arsenic with neat labeled diagram of the apparatus.

2. a) What are the various errors that occurs during analysis?

   b) Write briefly about Complexometric titrations.

II. Write notes on: **(6 x 5 = 30)**

1. Explain the principle of Redox titrations with suitable examples.
2. Give the preparation, assay and uses of calcium gluconate.
3. Explain the theory of precipitation titrations.
4. What are antidotes? Explain about any one antidote used for cyanide poisoning.
5. Write a note on various pharmaceutical aids with examples.
6. Clinical applications of Radio-Pharmaceuticals.

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[KZ 805] **OCTOBER 2011** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. a) What is gravimetric analysis? Discuss the steps involved in gravimetric analysis. **(12)**	17	40 min.	20
b) Discuss about organic precipitants. **(8)**			
2. a) What are antacids? Give the classification of antacids. **(3)**			
b) What are the qualities of an ideal antacid? **(3)**	17	40 min.	20
c) Give the preparation, identification test, assay and medicinal uses of aluminium hydroxide gel and magnesium carbonate. **(12)**			

II. Write notes on :

1. Define acidifier. Discuss the preparation, assay and medicinal uses of ammonium chloride.	4	10 min.	6
2. Write notes on non-aqueous solvents.	4	10 min.	6
3. Explain the role of fluorides as anticaries agents.	4	10 min.	6
4. Write a note on respiratory stimulants with an example.	4	10 min.	6
5. Explain the physiological role of Iron and copper.	4	10 min.	6
6. What are cathartics? Give an example.	4	10 min.	6
7. How do you minimize errors in pharmaceutical analysis?	4	10 min.	6
8. Discuss oral rehydration therapy.	4	10 min.	6
9. Describe the principle involved in Modified Volhard's method with an example.	4	10 min.	6
10. What are the fundamentals of volumetric analysis?	4	10 min.	6

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[LA 805] **APRIL 2012** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Explain the sources of impurities with examples. Discuss on the principle involved in the limit test for iron and lead	17	40 min.	20
2. Explain on physiological acid – base balance and its importance. Briefly discuss on any five electrolytes used in acid – base imbalance.	17	40 min.	20
II. Write notes on :			
1. Any one preparation and Assay of boric acid.	4	10 min.	6
2. Theory and solvents used in non- - aqueous titration.	4	10 min.	6
3. What is EDTA? write its structure and importance in complexometric titration	4	10 min.	6
4. Role of copper as an essential element	4	10 min.	6
5. Co-precipitation and post precipitation	4	10 min.	6
6. Use of adsorption indicators in precipitation titration	4	10 min.	6
7. Labeling of radiopharmaceuticals, handling and storage of radioactive materials	4	10 min.	6
8. Determinate and indeterminate errors	4	10 min.	6
9. What is antidote? Classify them. Explain the action of sodium nitrite as an antidote in cyanide poisoning.	4	10 min.	6
10. Medicinal uses of carbon dioxide and nitrous oxide.	4	10 min.	6

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[LB 805] **OCTOBER 2012** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 100 marks**

Answer ALL questions in the same order.

I. Elaborate on :	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. a) Explain about the dental products that have studied? b) Give the preparation, Identification tests, assay and medicinal uses of any two antacids.	17	40 min.	20
2. a) Explain the principle involved in nonaqueous titrations. b) Write the preparation and standardisation of perchloric acid. c) Types of errors in quality control.	17	40 min.	20

II. Write notes on :

1. Write the various steps involved in Gravimetry analysis.	4	10 min.	6
2. Explain about the Expectorants.	4	10 min.	6
3. Describe the theory of indicators.	4	10 min.	6
4. Write about the Cathartics.	4	10 min.	6
5. What is Ceriometry and mention about its advantages?	4	10 min.	6
6. Write the Clinical applications of radiopharmaceuticals with examples.	4	10 min.	6
7. Explain about the Masking and Demasking agents.	4	10 min.	6
8. Write the preparation, assay and uses of chlorinated lime.	4	10 min.	6
9. Give the principle involved in Modified Volhard's method.	4	10 min.	6
10. Write a note on Dentifrices.	4	10 min.	6

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[LC 805] **APRIL 2013** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 100 marks**

Answer All questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Explain about the dental products that have studied?

   b) Give the preparation, Identification tests, assay and medicinal uses of any two antacids.

2. a) Explain the theory of indicators.

   b) Write the principle and methods involved in the precipitation titration.

II. Write notes on: **(10 x 6 = 60)**

1. Define the term antidote and write about any one antidote used for cyanide poisoning.
2. Write the Preparation and standardisation of percholric acid.
3. What is complexometric titration and explain its principle.
4. Explain about the Electrolyte combination therapy.
5. What are the various experimental techniques of gravimetric analysis
6. Write the preparation and assay of Boric acid.
7. Describe the theory of redox titration.
8. Give the storage condition for oxygen, carbondioxide and nitrous oxide.
9. Explain the various types of errors in quality control.
10. Give an account on Dentifrices.

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[LD 805] **OCTOBER 2013** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer All questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Describe the principle and procedure involved in the limit test for Iron.
   b) Explain the procedure for the assay of oxygen and carbon dioxide.
2. a) Explain the theory of redox titration.
   b) Explain the various concepts of Acid-base.
   c) Give an account on Neutralization curve.

II. Write notes on: **(10 x 3 = 30)**

1. How will you prepare and standardize 0.05 M disodium EDTA.
2. Explain types of solvent used in non aqueous titration.
3. Describe the principle involved in Mohr's method.
4. What are the applications of buffer solution in pharmacy.
5. Write a note on the assay and uses of aluminium hydroxide gel.
6. Explain the physiological role of copper & selenium.
7. What are cathartics? Give an example.
8. Explain Geiger-Muller counter
9. What are antacids? Classify them with examples.
10. Write molecular formula and uses of the following:
    a) Potassium Iodide.
    b) Sodium Fluoride.
    c) Ferrous fumarate.

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[LE 805] **APRIL 2014** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer All questions

I. Elaborate on: **(2 x 20 = 40)**

1. a) Explain the various steps involved in Gravimetric analysis.

   b) Explain the theory of acid-base indicators.

2. a) Explain the principle and procedure involved in the limit test for Arsenic with neat labeled diagram of the apparatus.

   b) Write notes on Non-aqueous titration.

II. Write notes on: **(10 x 3 = 30)**

1. How will you prepare and standardize 0.1 N Sodium hydroxide.
2. Explain the different types of Complex metric titration.
3. Describe in detail about Henderson-Hasselbalch equation.
4. Write a note on the assay and uses of calcium gluconate.
5. Describe the principle involved in volhard's method.
6. What are antacids? Classify them with examples.
7. Explain the physiological role of zinc.
8. What are antidotes? Explain about any one antidote.
9. Write a note on purified water & water for injection.
10. Write molecular formula and uses of the following:

    a) Hydrogen peroxide.

    b) Ferric sulphate.

    c) Potassium citrate.

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[LF 805] **OCTOBER 2014** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(2009-2010 Regulation)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer All questions

I. Elaborate on: **(4 x 10 = 40)**

1. What are Expectorants? How do they act?
   Discuss the role of Ammonium chloride as respiratory stimulants.
2. What is Gravimetric titration?
   Explain the various steps involved in it with example.
3. What is Complexometric titration? What are its application?
   Explain about the masking and demasking agents.
4. Discuss about Electrolyte replenishers and composition of ORS.

II. Write notes on: **(6 x 5 = 30)**

1. Explain the theory of indicator.
2. What are antacids? Classify them. What are the factors for choice ideal antacids?
3. What are antimicrobial? Write its mechanism of action with suitable example.
4. Define the following terms with one inorganic compound as in use.
   a) Disinfectant.
   b) Anti neoplastic agent.
   c) Sedatives.
   d) Anti rheumatics.
   e) Emitics.
5. Medicinal gases uses and storages.
6. Write note on Radio pharmaceuticals.

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[LG 805] **APRIL 2015** **Sub. Code: 3805**

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(2009-2010 Regulation)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 383805

Time: Three Hours **Maximum: 70 marks**

Answer All questions

I. Elaborate on: **(4 x 10 = 40)**

1. Explain the physiological role of iron and iodine with the related disease condition.
2. How will you classify antimicrobials?
   Write the mechanism of action and assay of boric acid and silver nitrate.
3. What are antidotes? How do they act during cyanide poisoning?
   Write the preparation and assay of sodium thiosulphate.
4. Write a note on oral rehydration salt and electrolyte combination therapy.

II. Write notes on: **(6 x 5 = 30)**

1. Explain about direct and indirect titrations involving potassium permanganate and iodine with any one example each.
2. Define the term sedative and expectorant.
   Write the preparation of potassium bromide and potassium citrate.
3. What are the compounds used under acid base therapy?
   Write the uses for any five compounds.
4. Write the physiological role of copper and sulphur.
5. Write a note on non aqueous titration and elaborate on the indicators used.
6. Explain Mohr’s method and Volhard’s methods of titrations.

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[LH 805] **OCTOBER 2015** **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION

(2009-2010 Regulation)

FIRST YEAR

PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time: Three Hours **Maximum: 70 marks**

Answer ALL questions

I. Elaborate on : **(4 x 10 = 40)**

1. Define the term Pharmaceutical Aids with suitable examples.
2. What is Non - Aqueous titration? Explain its principle with suitable example.
   List out solvent used in the Non-Aqueous titration.
   How will you prepare and standardize the 0.1N Perchloric acid?
3. Explain the theory of precipitation titrations.
   Describe the principle involved in modified Volhard's method with example.
4. What are Electrolytes? Write its essential function in the body.
   Give note on acid-base regulators.

II. Write notes on : **(6 x 5 = 30)**

1. What is Ceriometry? Explain its advantages over other oxidizing agents.
2. Henderson - Hasselbalch equation.
3. Limit test for arsenic.
4. What is acidifiers and antacid? Give examples.
5. Note on Radio Pharmaceuticals.
6. Name the titration for the following compounds:
   (a) Ammonium chloride.
   (b) Copper sulphate.
   (c) Barium sulphate
   (d) Sodium benzoate.
   (e) Calcium gluconate.

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[LI 805] APRIL 2016 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on : **(4 x 10 = 40)**

1. What are Acid-base titrations? Explain its principle with suitable examples.
2. Explain the principle and procedure involved in the limit test for Iron.
3. What are Antimicrobials? List out various Official Preparation. Explain.
4. What are Expectorants? Give the preparation, identification test, assay of any one Expectorant.

II. Write notes on : **(6 x 5 = 30)**

1. Write any five Radio Pharmaceuticals and their uses.
2. What are Antidotes? Explain about any one Antidote used for cyanide poisoning.
3. Explain the theory of Indicators.
4. Write the various steps involved in Gravimetric Analysis.
5. Give the principle involved in the assay of Sodium Chloride.
6. Write a note on Dentifrices.

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[LJ 805] OCTOBER 2016 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. List out various Volumetric methods. Explain Redox titration with suitable example.

2. Explain the principle and procedure involved in the limit test for arsenic with the help of a neat diagram.

3. Give the preparation, identification tests, assay and medicinal uses of any two Antacids.

4. What is Complexometric titration? Explain its principle with suitable examples.

II. Write notes on: **(6 x 5 = 30)**

1. Describe the principle involved in modified Volhard's method with example.
2. Define error and write its types.
3. Write a note on various Pharmaceutical Aids with examples.
4. What are Cathartics? Give an example.
5. Role of Zinc as essential elements.
6. Explain about the Masking and Damasking agents.

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[LK 805] MAY 2017 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. Write in detail about the sources of impurities in pharmaceutical substances. Explain the method and principle involved in the limit test for sulphate.
2. Define radioactivity. Explain the types of radiation. List out various method for detecting and measuring radioactive radiation. Describe any one method.
3. Define antacid, classify it with examples. What are the qualities of an ideal antacid? Write about the combinations of an antacid with suitable examples. Explain the acid neutralizing capacity of antacid.
4. What is non-aqueous titration? Explain the various solvents involved in non-aqueous titration with examples.

II. Write notes on: **(6 x 5 = 30)**

1. Write the storage and medicinal uses of oxygen, nitrous oxide and helium.
2. Write a note on iodine solutions and povidone - iodine.
3. Explain the assay of calcium gluconate and give any one identification test.
4. a) Name the inorganic compounds used as antidote for cyanide poisoning. Justify your answer.
   b) Define expectorant, sedative and hypnotics.
5. Discuss on official preparations of sodium chloride.
6. Write a note on silicone polymers and simethicone.

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[LL 805] OCTOBER 2017 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. Explain on various types of Argentimetric titrations with examples.

2. Explain the principle and procedure for limit test for iron including the reason for the addition of various reagents.

3. Describe the principle involved in the assay of Magnesium Sulphate and Ammonium Chloride.

4. Define primary and secondary standards. What are the requirements of primary standard? Add a note on Arrhenius concept of acid - base and its limitations.

II. Write notes on: **(6 x 5 = 30)**

1. Define antidote, sclerosing agents and expectorants with examples. Add a note on antimicrobial agents.
2. Write the clinical application, hazards and precautions of radiopharmaceuticals.
3. Describe the electrolytes used for replacement therapy with an example.
4. Give the preparation, medicinal uses and storage condition of oxygen and nitrous oxide.
5. List the sources of impurities in pharmaceutical substances and explain on any two.
6. Write the principle involved in the titration of very weak bases by non aqueous titration.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LM 805] MAY 2018 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. What is Non-Aqueous Titration? Write the types of solvents used in Non-Aqueous Titration with examples.

2. Explain in detail about different types of Complexometric titrations with examples.

3. Explain the properties of Alpha, Beta and Gamma Rays. What are the clinical applications of Radio isotopes?

4. Explain on physiological acid-base balance and its importance. Discuss briefly on any five electrolytes used in acid-base imbalance.

II. Write notes on: **(6 x 5 = 30)**

1. Explain the role of fluorides as anti caries agent.
2. What are respiratory stimulant? Give the preparation and uses of Ammonium carbonate.
3. Write note on pharmaceutical importance of medicinal gases.
4. Write about acid neutralizing capacity of antacids.
5. Explain the principle and procedure involved in the limit test for Arsenic with a neat labelled diagram.
6. Define antidote and write a note on Sodium nitrite.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 805] AUGUST 2018 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. Define Acidifiers and explain the term "Achlorhydria". Give the preparation, assay and medicinal uses of Ammonium chloride.

2. List out various volumetric methods and explain back titration with example.

3. What are Antimicrobials? Write the preparation and assay of chlorinated lime and Boric acid.

4. Write in detail the preparation, properties, identification tests, assay and uses of Oxygen.

II. Write notes on: **(6 x 5 = 30)**

1. What is Ceriometry? Explain its advantage over other oxidizing agents.
2. Write the principle involved in the limit test for Iron.
3. Explain the physiological role of Calcium and Potassium.
4. Write notes on masking and demasking agents.
5. Write notes on radio opaque contrast media.
6. Define Sedatives. Write the preparation and assay of Potassium bromide.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LO 805] MAY 2019 **Sub. Code: 3805**

PHARM. D DEGREE EXAMINATION
(2009-2010 Regulation)
FIRST YEAR
PAPER V – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 383805

Time : Three hours **Maximum : 70 Marks**

I. Elaborate on: **(4 x 10 = 40)**

1. Explain in detail about acid-base balance in blood. What are the electrolytes used for maintaining the physiological acid-base balance? Discuss in detail about any two of it.
2. Write the assay with principle, storage and medicinal uses of:
   a) Ammonium chloride b) Hydrogen peroxide
3. Briefly discuss about Antimicrobials. Explain in detail about the preparation, properties with suitable reactions and medicinal uses $KMnO_4$.
4. a) What is EDTA? Write its structure and role in Complexometric titration.
   b) Briefly discuss on Redox titrations.

II. Write notes on: **(6 x 5 = 30)**

1. Give reasons:
   a) Addition of alcohol in the limit test for Sulphate.
   b) Use of lead acetate cotton wool in the limit test for Arsenic.
   c) Addition of Ammonia in the limit test for Iron.
2. Explain the storage and labelling procedure of Oxygen, Carbon di-oxide and Nitrous oxide.
3. Explain Pharmaceutical aids. Give the various types of Pharmaceutical aids with suitable examples.
4. Write the preparation and standardisation of 0.1N Perchloric acid.
5. Differentiate between Iodimetry and Iodometry with suitable example.
6. Write briefly on Theory of indicators.

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