

I/IV B. PHARMACY (Supple) EXAMINATIONS, DECEMBER - 2022**First Semester****PHARMACEUTICAL ANALYSIS - I**

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. What are errors, classify them. Define accuracy and precision. Describe the steps to minimize errors.
2. What are neutralization curves ? Explain the selection of indicators in the titration between weak acid with strong base using neutralization curves.
3. Define oxidation and reduction. Explain the principle involved in titration with potassium dichromate. Give its applications with suitable examples.
4. Explain the theories of neutralization indicators. Write a note on mixed indicators.
5. Write a note on solvents used in non-aqueous titrations. Explain the preparation and standardization of 0.1N perchloric acid.
6. Differentiate between alkalimetry and acidimetry with an example.
7. Explain the methods to determine end point of potentiometric titration with its applications.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Define normal solution. Explain preparation and standardization of 0.1N potassium permanganate solution.
9. Explain the titration curve of strong acid versus strong base. How are these curves useful in titrimetric analysis.
10. Write a note on universal indicators and mixed indicators with examples and their uses.
11. Explain the Mohr's method of determination of halides.
12. Define gravimetry. Mention two compounds analysed by gravimetry. Explain the advantages and disadvantages of this technique.
13. Explain any two conductometric titration curves.
14. Define polarography and indicate its applications. Enumerate the Ilkovic equation.



Total No. of Questions : 14]

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I/IV B. PHARMACY DEGREE EXAMINATIONS, JULY - 2022
First Semester

PHARMACEUTICAL ANALYSIS - I

Time : **Three Hours**

Maximum : **75 Marks**

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. a) Enumerate the methods used for reducing errors.
b) Write a note on pharmacopoeias.
2. a) Write principle and procedure involved in estimation of $MgSO_4$.
b) Classify acid base titrations with examples. Write in brief on neutralizing curves.
3. Write about different non-aqueous solvents with examples. Explain the estimation of Sodium benzoate.
4. a) With a neat sketch explain construction of dropping mercury electrode.
b) Discuss the methods used to determine end point in potentiometric titrations.
5. a) Write the sources of impurities in medicinal agents.
b) Write the estimation of Sodium Chloride by Mohr's method.
6. Explain the principle and steps involved in Gravimetry.
7. Explain the limit test for arsenic with diagram.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Write the construction and working of the Glass electrode.
9. Write a note on determinate errors.
10. Write in detail on Iodimetry.
11. Discuss the methods used for expression of concentration.
12. What is Ilkovic equation. Explain its significance.
13. Write in brief on metal-ion Indicators.
14. Explain the concept of cerimetry.



Total No. of Questions : 14]

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**I/IV B. PHARMACY (SUPPLE) DEGREE EXAMINATIONS,
JANUARY - 2022
First Semester**

PHARMACEUTICAL ANALYSIS - I

Time : **Three Hours**

Maximum : **75 Marks**

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. (a) What are sources of errors and methods of minimising errors.
(b) Write a note on pharmacopoeia.
2. (a) Write the principle, procedure and applications of Fajan's Method.
(b) What are masking and demasking agents ? Discuss their role in complexometry.
3. (a) What is the significance of standardising pharmaceutical substances ? Add a note on procedures used for computation of analytical results.
(b) Write in brief on redox reactors.
4. (a) Discuss the factors involved in selection of an indicator.
(b) Give an account on indicators used in acid-base titrimetry.
5. Write the methods to determine end point of potentiometric titrations and its applications.
6. Explain about the limit test for Arsenic.
7. What are gravimetric titrations. Classify them. Write a note on precipitation gravimetry.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Give a brief note on Metal ion indicators.
9. Explain about diazotisation titration.
10. Write the concept of Dichrometry.
11. Write the principle, construction and working of DME.
12. How do you prepare and standardise 0.1 N KMnO_4 Solution.
13. Discuss the methods used for expression of concentration.
14. Write in brief on
(a) accuracy (b) precision.



I/IV B.PHARMACY (Supply) DEGREE EXAMINATIONS, OCTOBER-2020

First Semester

B.Pharmacy

PHARMACEUTICAL ANALYSIS-I

Time: Three Hours

Maximum marks:75

SECTION-A

Answer any FIVE Questions.

5X10=50M

1. Write the sources, types and methods of minimizing errors.
2. Write about different non-aqueous solvents with examples. Explain the estimation of sodium benzoate.
3. Explain the principle and steps involved in gravimetry.
4.
 - a) Explain the concept of oxidation and reduction.
 - b) Discuss and differentiate iodometry and iodimetry.
5.
 - a) Write the construction and working of the following with diagram
 - i) calomel electrode
 - ii) Glass electrode
 - b) Write in brief about the methods to determine the end point of potentiometric titrations.
6.
 - a) Write the estimation of sodium chloride by Mohr's method.
 - b) Write about masking and demasking process with example.
7.
 - a) Write the sources of impurities in medicinal agents.
 - b) What is limit test? Explain the limit test for arsenic with diagram.

SECTION-B

Answer any FIVE Questions.

5X5=25M

8. Write the standardization of 0.1 N sodium thiosulphate.
9. Write a short note on two theories of acid-base indicators.

P.T.O

10. Discuss on various precipitation techniques in gravimetry with examples.
11. Write the principle and applications of bromatometry and cerimetry.
12. Explain about different currents in polarography. Write the applications of polarography.
13. Write about volhard's method and conditions for it.
14. Explain the concept of acidimetry.



I/IV B.PHARMACY (Regular) DEGREE EXAMINATIONS, JULY/AUG-2016
(1st & 2nd Semesters)

PHARMACEUTICAL ANALYSIS-I

Time: Three Hours

Maximum marks:70


SECTION-A

Answer any FOUR questions. (4 x 10=40 M)

1. Write the sources of impurities and their effects in pharmacopoeial substances in detail.
2. Explain the theory and applications of precipitation titrations.
3. Explain the theory and applications of Diazotisation titrations.
4. Write down the steps involved in the determination of moisture content.
5. Explain limit tests of Arsenic & heavy metals.
6. Write a note on Good Laboratory practices and its importance in analysis of pharmaceuticals.

SECTION-B

Answer any TEN questions. (10 x 3=30 M)

7. Define Molarity & Normality of a solution.
 8. Write about different types of Weighing balances.
 9. Explain solubility products & its units.
 10. Give a brief note on buffers.
 11. How do you determine alcohol content in a substance.
 12. Describe the various types of non-aqueous titrations.
 13. What is coagulation?
 14. Explain Oxidation & Reduction.
 15. Discuss the indicators used in complexometric titrations.
 16. What are significant members.
 17. Explain the principle involved in Gravimetry.
 18. Write about primary & secondary standards.
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I/IV B.PHARMACY DEGREE EXAMINATIONS, JAN/FEB- 2016**First & Second Semesters****PHARMACEUTICAL ANALYSIS-I****Time: Three Hours****Maximum marks:70****SECTION-A****Answer any FOUR questions.****4X10=40M**

1. Explain in detail computation of analytical results
2. What is the importance of limit test in pharmaceutical substances? Write the procedure for the limit test of lead and heavy metals?
3. Explain the principle and procedure involved in diazotization titration with applications?
4. Write the method of coagulation and incineration in gravimetric analysis with examples?
5. Explain the theory of non aqueous titrations in pharmaceutical analysis?
6. Describe the importance of good laboratory practices in pharmaceutical analysis?

SECTION-B**Answer any TEN questions.****10X3=30M**

7. Write about sources of errors and their rectification?
8. Write the importance of limit test?
9. Explain the term Normality, Molarity and Molality?
10. Explain the common ion effect with an example?
11. Write the use of primary and secondary standards?
12. What is co-precipitation and post-precipitation?
13. Explain masking and de-masking agents?
14. How do you determine moisture content on a Pharmaceutical sample?
15. Write a note on account of the indicators used in titration?
16. Write about gas samplers?
17. Explain ionic equations of solutions?
18. Write a note on principle of acidimetry and alkalimetry?



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I/IV B.PHARMACY (Supply) DEGREE EXAMINATIONS, OCTOBER-2020

First Semester

B.Pharmacy

PHARMACEUTICAL ANALYSIS-I

Time: Three Hours

Maximum marks:75

SECTION-A

Answer any FIVE Questions.

5X10=50M

1. Write the sources, types and methods of minimizing errors.
2. Write about different non-aqueous solvents with examples. Explain the estimation of sodium benzoate.
3. Explain the principle and steps involved in gravimetry.
4. a) Explain the concept of oxidation and reduction.
b) Discuss and differentiate iodometry and iodimetry.
5. a) Write the construction and working of the following with diagram
i) calomel electrode ii) Glass electrode
b) Write in brief about the methods to determine the end point of potentiometric titrations.
6. a) Write the estimation of sodium chloride by Mohr's method.
b) Write about masking and demasking process with example.
7. a) Write the sources of impurities in medicinal agents.
b) What is limit test? Explain the limit test for arsenic with diagram.

SECTION-B

Answer any FIVE Questions.

5X5=25M

8. Write the standardization of 0.1 N sodium thiosulphate.
9. Write a short note on two theories of acid-base indicators.

P.T.O

10. Discuss on various precipitation techniques in gravimetry with examples.
11. Write the principle and applications of bromatometry and cerimetry.
12. Explain about different currents in polarography. Write the applications of polarography.
13. Write about volhard's method and conditions for it.
14. Explain the concept of acidimetry.



I/IV B.PHARMACY (Supply) DEGREE EXAMINATIONS, AUGUST-2019**First Semester****B.Pharmacy****PHARMACEUTICAL INORGANIC CHEMISTRY****(Effective from the admitted batch 2017-18)****Time: Three Hours****Maximum marks:75****SECTION-A****Answer any FIVE Questions.****5X10=50M**

1. a) Discuss the importance of limit test in pharmaceutical preparations.
b) Write the principle and procedure involved in the limit test for Iron.
2. a) What is meant by physiological buffers? Explain the mechanism of maintaining pH of blood.
b) Role of buffers in pharmacy.
3. a) State the requirements for an ideal Antacid? How is antacid property evaluated?
b) Give examples of saline laxatives. Compare their advantages and disadvantages.
4. a) Explain the mechanism of action of astringents.
b) Write the preparation, properties and uses of zinc sulphate.
5. Describe the electrolyte combination therapy.
6. Name the official compounds of Iron. Describe the preparation, properties and assay of Ferrous sulphate.
7. Discuss the applications of radio isotopes in research, diagnosis and medicine.

P.T.O

SECTION-B

Answer any FIVE Questions.

5X5=25M

8. Describe the principle and procedure involved in limit test for heavy metals.
9. Write a note on Oral rehydration salts.
10. Write the preparation, uses of Boric acid.
11. What is the role of fluoride as anticaries agent and write the preparation, properties, uses of sodium fluoride.
12. Give the preparation, properties, uses of sodium potassium tartrate.
13. What is the role of activated charcoal in poisoning.
14. What precautions have to be taken in handling of radio active materials.



I/IV B. PHARMACY DEGREE EXAMINATIONS, JULY - 2022

First Semester

PHARMACEUTICAL INORGANIC CHEMISTRY

(Effective from the admitted batch of 2017-18)

Time : Three Hours

Maximum : 75 Marks

SECTION - A

Answer any FIVE Questions.

5x10 = 50 M

1. a) Discuss the various sources of impurities.
b) Livit test for Sulphates.
2. a) Discuss the methods of adjusting toxicity.
b) Functions of major physiological ions.
3. a) Write the role of buffers in pharmacy.
b) Write a note on dentifrices.
4. Give the method of preparation, properties and uses of following compounds.
a) Calcium gluconate.
b) Sodium fluoride.
5. a) What are Antacids ? Give the ideal properties of Antacids.
b) Preparation, properties and uses of Chlorinated lime.
6. Define Haematnic. Write the preparation, properties and assay of Ferrous Sulphate.
7. a) Explain about storage handling and precautions of radioactive materials.
b) Discuss the properties of α , β and γ radiations.

SECTION - B

Answer any FIVE Questions.

5x5 = 25 M

8. Discuss the preparation, properties and uses of Ammonium Chloride.
9. Give the principle involved in modified limit test for Chlorides.
10. Classify antimicrobial agents ? Explain their mechanism of action.
11. Write a note on precautions and pharmaceutical applications of radioisotopes.
12. Give a short note on ORS.
13. Define astringent. Add a note on their mechanism of action.
14. Write a note on bentonite.

