

(Mock Exam-2)
B.Pharm. (First Semester)
End Semester Examination, 2022
Paper Second
Pharmaceutical Analysis-I

Time: Three Hours]

[Maximum Marks: 75

Note: This question paper consist of following parts-

Part A: Attempt all 20 Multiple Choice questions (MCQ's). Each MCQ has 04 choices-A, B, C & D and carries 01 mark.

20x1=20

Part B: Attempt any 02 Long answer questions out of 03 questions. Each question carries 10 marks.

02x10=20

Part C: Attempt any 07 short answer questions out of 10 questions. Each question carries 05 marks.

07x5=35

Inst: The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation.

Part A

- What is meant by the term Accuracy?
 - The overall quality data
 - Lack of bias in the data
 - Level of detail at which the data is stored
 - Extent to which a value approaches its true value
- The significant figure in 3.0840 is
 - 4
 - 5
 - 3
 - a & c
- Which one is an example of primary standard
 - NaOH
 - KMnO₄
 - HCl
 - Na₂CO₃
- Dithizonate complex is formed in one of the following limit test
 - Arsenic
 - Lead
 - Sulphate
 - Iron
- The phenomenon of lowering the degree of ionization of a weak electrolyte by adding a strong electrolytic solution by using one of similar ions is known as
 - pH
 - Common ion effect
 - Law of mass action
 - chemical equilibrium
- Salt of strong acid and weak base results in formation of a solution which is
 - Neutral
 - Acidic
 - Basic
 - a & c
- Example of amphiprotic solvent is
 - NH₃
 - CHCl₃
 - CH₃COOH
 - Toulene
- Which of the following is used as titrant for estimation of weakly acidic drugs by Non aqueous Titrations?
 - LiOCH₃
 - HClO₄
 - Benzoic acid
 - Acetic anhydride
- The phenomenon of dispersing an insoluble material into colloid is known as
 - Supersaturation
 - Peptization
 - Lyophilization
 - Tyndal effect
- Following term is associated with sodium nitrite titrations performed amperometrically:
 - Live stop end point
 - Red stop end point
 - Dead stop end point
 - Black Platinum end point
- Brick Red precipitates are formed in one of the following precipitation titration
 - Fajan's Method
 - Gay Lussac Method
 - Volhard's Method
 - Mohr's method
- Ammonium salt of purpuric acid is
 - Calcon
 - Murexide
 - Catechol violet
 - Xylenol orange
- The gravimetric factor of Cl in AgCl is (Given: atomic mass of Ag is 107.86, Cl is 35.45)
 - 0.2473
 - 0.4276
 - 0.3286
 - 3.04
- Which of the following catalyst is used in cerimetry?
 - Cobalt
 - Zinc
 - Nickel
 - Osmium tetroxide
- In the determination of arsenic by potassium Iodate titration, the purple color produced changes to yellow due to formation of
 - I₂
 - ICl
 - ICl₂
 - IO₃
- Which of the following acid is used for the platinization of electrode of a conductivity electrode?
 - Nitroplatinic acid
 - Benzoplatinic acid
 - Cloroplatinic acid
 - Sulphoplatinic acid
- Oxygen is removed by bubbling following gas while using rotating platinum electrode.
 - Chlorine
 - Helium
 - Argon
 - Nitrogen

18. Which one of the following electrode is a reference electrode?
a) Hydrogen electrode b) Quinhydrone c) Glass membrane d) Calomel
19. Chloral hydrate is used in Complexometry as
a) Masking agent b) Demasking agent c) Solvent d) a & b
20. Fraction of the total current carried by an ion is known as
a) Transport number b) Hittorf number c) Transport number d) All of the above

PART B

- Q.1 Write a note on types of errors in analysis with examples. How are they minimized?
- Q.2 Explain the Principle involved in Fajan's method and Volhards method.
- Q.3 Classify different types of Complexometric Titrations. Explain them briefly with the help of examples.

PART C

- Q.1 Explain the concepts of oxidation and reduction.
- Q.2. Write a note on Mohr's Method.
- Q.3. Explain the construction and working of Dropping Mercury electrode.
- Q.4. How 0.1 M acetous Perchloric acid is prepared and standardized? Write the procedure for estimation of any weak basic drug by Non aqueous titration.
- Q.5. Differentiate between Iodimetry and Iodometry taking examples.
- Q.6. Explain the principle and procedure involved in assay of calcium gluconate powder by complexometry.
- Q.7. Explain the mechanism involved in the acid base indicators with examples.
- Q.8. Explain Nucleation and Particle growth. Selection of wash liquids is an important step in Gravimetry.
Comment.
- Q.9. Explain the mechanism involved in the titration of primary aromatic amines by diazotization titration method.
- Q.10. Explain the Neutralization Titrations by Conductometry.