

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary End Semester Examination – Summer 2022

Course: B. Pharmacy

Sem: I

Subject Name: Pharmaceutical Analysis I

Subject Code: BP102T

Max Marks: 75

Date: 29/08/2022

Duration: 3.45 Hr.

Instructions –

1. All questions are compulsory
2. Answers to MCQs should be written in full sentences
3. Draw diagrams / figures wherever necessary
4. Figures to right indicate full marks

Q. 1. Multiple Choice Questions (MCQs) = $20 \times 1 = 20$ (All the questions are compulsory)

i) Errors arise due to the equipment is responsible for them

- A. Method error
B. Instrumental error
C. Personal error
D. Random error

ii) Acid is a substance which dissociates in water to produce hydrogen ions

- A. Arrhenius theory
B. Lewis theory
C. Bronsted theory
D. Lowry theory

iii) Oxidation-Reduction titration is also known as

- A. Complexometric titration
B. Gravimetric titration
C. Redox titration
D. Gasometric titration

iv) Potentiometry is type of _____ method.

- A. Qualitative
B. Chromatographic
C. Classical
D. Electro-chemical

v) Conductometry used for the measurement of

- A. Conductivity
B. Potential
C. Temperature
D. Concentration

vi) Standardization of Iodine is carried out using _____

- A. Sodium thiosulphate
B. Oxalic acid
C. Perchloric acid
D. None of these

vii) The titration carries out between KCl and AgNO₃ is termed as _____ titration.

- A. Oxidation-Reduction
B. Precipitation
C. Acid-Base
D. None of these

viii) 8.5 ml HCl in 1 litre = _____

- A. 0.1 M
B. 0.1 N
C. Both A and B
D. 0.5 M

ix) In strong acid – strong base titration, the pH of mixture at initial stage is find out by formula

- A. $\text{PH} = -\log[\text{H}^+]$ B. $[\text{H}^+] = \text{NaVa} - \text{NbVb} / (\text{Va} + \text{Vb})$
C. $\text{POH} = -\log[\text{OH}^-]$ D. $[\text{OH}^-] = \text{NbVb} - \text{NaVa} / (\text{Va} + \text{Vb})$

x) An example of a primary standard substance is

- A. FeSO_4 B. $\text{Na}_2\text{C}_2\text{O}_4$
C. NH_4OH D. NaOH

xi) Which is the conjugate base of H_2PO_4^- ?

- A. OH^- B. PO_4^{3-}
C. HPO_4^{2-} D. H_3PO_4

xii) Which one is aprotic solvent?

- A. Chloroform B. Benzene
C. Both D. None

xiii) Which one is useful in non-aqueous titration?

- A. Leveling solvent B. Differentiating solvent
C. Both D. None

xiv) AgCl has to be filtered off before titration using

- A. Modified Volhard's method B. Mohr's method
C. Fajan's method D. None of the above

xv) EDTA has _____ binding sites and therefore it is also called as multidentate ligand.

- A. Six B. Five
C. Four D. Seven

xvi) Indicator used in complexometric titration is

- A. Erichrome black T B. Xylenolorange
C. Mordant black II D. All

xvii) Digestion of precipitate also known as

- A. Ageing B. Gravimetric factor
C. Co – precipitation D. Ostwald ripening

xviii) Potentiometry is an _____ method of analysis

- A. Spectroscopic B. Electrometric
C. Analytical D. None of the above

xix) Each electrochemical cell is composed of

- A. Two half cells B. Half cells
C. Both A and B D. None of the above

xx) Oxidation involves

- A. loss of hydrogen B. loss of oxygen
C. gain in hydrogen D. gain in electrons

Q. 2. Long Answers) = 2 x 10 = 20 (Answer 2 out of 3)

i) Write in detail different Sources of errors, types of errors, suggest the ways of minimizing them.

ii) Explain in detail Volhard's method and Fajans method.

iii) Write in detail about Polarography.

Q. 3. Short Answers = 7 x 5 = 35 (Answer 7 out of 9)

- i) Explain the solvents used in non-aqueous titrations.
- ii) Explain the leveling and differentiating effect.
- iii) How will you prepare and standardize 1M Sodium hydroxide?
- iv) Enlist steps involved in gravimetry. Explain in detail post precipitation.
- v) Explain construction and working of dropping mercury electrode.
- vi) Write down Different types of redox titrations, Explain in detail Cerimetry.
- vii) State Principles, methods and application of diazotisation titration.
- viii) Define pharmaceutical analysis. Explain the importance of pharmaceutical analysis.
- ix) What is masking and demasking agent.

-----END OF THE PAPER-----

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE**

Supplementary Examination –Summer 2022

Course:B. Pharmacy

Sem:I

Subject Name:Communication Skills

Subject Code: BP105T

Max Marks:35

Date: 12/09/2022

Dutation: 2 Hr.

Q. 2. Long Answers = 1 x 10=10 (Answer 1 out of 2)

1. Discuss role of communication.
2. Describe communication style matrix.

Q. 2. Short Answers = 5 x 5=25 (Answer 5 out of 7)

1. Differentiate Physiological and Psychological barriers.
2. Discuss advantages of face to face communication
3. Discuss the types of listening where emotions are considered.
4. Define interview and classify the different interview techniques.
5. Demonstrate the structure of presentation.
6. Discuss the types of group discussion
7. Evaluate Do's and Don'ts of groups discussion.

-----End of the paper-----