

Seat Number

--	--	--	--	--



कपिला - 002

W17

BP 102 T Pharmaceutical Analysis - I (711102)

P. Pages : 3

Time : Three Hours

Max. Marks : 75

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Figure to the right indicate full marks.

1. Multiple choice questions (MCQs).

20x1
=20

- 1) Following are the secondary standard except.
a) Na_2CO_3 b) HCl
c) H_2SO_4 d) NaOH
- 2) Which of the following is protophilic solvent.
a) Acetic acid b) Pyridine
c) Water d) Carbon tetrachloride
- 3) Which of the following is weak acid indicator.
a) Methyl orange b) Methyl red
c) Phenolphthalein d) None of the above
- 4) Which method proposed the end point detection by nature of adsorption on surface of precipitate.
a) Volhard method b) Mohr's method
c) Gay Lussac's method d) Fajan's method
- 5) Following is the type of systematic error except.
a) Instrumental error b) Method error
c) Personal Error d) Random error
- 6) The unit of specific conductance is _____.
a) $\text{Ohm} \cdot \text{cm}^{-1}$ b) Ohm^{-1}
c) All the above d) None of the above
- 7) _____ is an example of reference electrode.
a) Standard Hydrogen Electrode
b) Standard calomel Electrode
c) Ag-AgCl electrode
d) All the above

- 20) Which of the following used as a self indicator.
- a) KMnO₄
 - b) Methyl Red
 - c) HCl
 - d) AgNO₃

2. Solve any two.

- a) What is gravimetric analysis. Write the steps involved in gravimetric analysis.
- b) Explain the methods used for detection of end point in redox Titration. Explain in brief types of redox titration.
- c) Write in detail Volhard method. Explain in brief estimation of sodium chloride.

3. Solve any seven.

- a) Write a short note on metal ion indicator.
- b) Write the principle, method & application of diazotization analysis.
- c) Write the types of solvent used in Non-aqueous titration.
- d) Explain in brief masking & demasking agent.
- e) What is error. Explain in detail types of error.
- f) Write the assay of sodium benzoate in Non-aqueous Titration.
- g) Write the short note on Acid-base indicator.
- h) Write short note on dropping mercury electrode.
- i) Write the theory of redox titration.

2x10
=20

7x5
=35



- 8) In polarography ----- is recorded.
 a) Current Vs potential b) Vol of titrant recorded
 c) Conductance d) None of the above
- 9) Which indicator is used for the titration of weak acid & weak base.
 a) Methyl orange indicator b) Mixed Indicator
 c) Phenolphthalein indicator d) Thymol Blue Indicator
- 10) Dioxane is a solvent used in -----.
 a) Acid base titration b) Non-aqueous Titration
 c) Precipitation Titration d) Gravimetric analysis
- 11) AgNO₃ used as precipitating agent in Mohr's method against -----.
 a) NaCl b) KMnO₄
 c) NaOH d) HCl
- 12) Acidic or Basic dyes used in a ----- method.
 a) Volhard's method b) Gravimetric method
 c) Mohr's method d) Fajan's method
- 13) In complexometric titration chloral hydrate used as -----.
 a) Demasking agent b) Precipitating agent
 c) Masking agent d) Chelating agent
- 14) Oxidation is -----.
 a) Gain of electron b) Loss of electron
 c) Loss of oxygen d) None of the above
- 15) ----- is defined as degree of agreement between measured value & true value.
 a) Accuracy b) Precision
 c) Error d) Random error
- 16) Indicator theory described by -----.
 a) Ostwald's theory b) Quinonoid theory
 c) All the above d) None of the above
- 17) Which of the following is an example of aprotic solvent.
 a) Benzene b) Pyridine
 c) Ethanol d) Glacial acetic acid
- 18) EDTA is ----- ligand.
 a) Unidentate b) Bidentate
 c) Tridentate d) Multidentate
- 19) Ox⁻-precipitation is a problem arises during -----.
 a) Conductometric titration b) Potentiometric titration
 c) Gravimetric Analysis d) Complexometric Titration