Code No.

Symbol Number: _____ Invigilator's Sign: _____ Superintendent's Sign: _____

Symbol No. in Words: _____

Faculty: Medicine and Allied Health Sciences **Level: Bachelor** **Year/Part: II/I**

Program: Bachelor of Pharmacy **Level: Bachelor** **F.M.: 50**

Subject: BP304 Pharmaceutical Analysis **Time: 3 Hours** **P.M.: 25**

i Answers should be given by filling the Objective Answer Sheet.

Ii Rough can be done in the main answer sheet

Iii Maximum time of 20 minutes within the total time is given for this group.

Group A (Multiple Choice Questions) **[10×1=10]**

1. Solvent with low dielectric constant is :

   a) Protophilic b) Protogenic c) Aprotic d) Amphiprotic

2. Accidental error is also referred as …….. error:

   a) Determinate b) indeterminate c) gross d) systemic

3. A mixture of 3 parts of phenolphthalein and 1 part of naphthol phthalein shows a change in color from pale rose to violet at pH…….

   a) 8.3 b) 7.9 c) 8.9 d) 9.8

4. In HNO_3 oxidation number of nitrogen is :

   a) +3 b) +5 c) -3 d) +4

5. Color change in endpoint of non-aqueous titration from yellow to red is shown by …… indicator:

   a) Methyl red b) Crystal violet c) Thymol blue d) Quinaldine red

6. A large K_a value indicates:

   a) Strong base b) strong acid c) weak acid d) weak base

7. When the experiment is repeated by the same person, using the same equipment and the results are close together, it is called:

   a) repeatability b) reproducibility c) accuracy d) error

8. When Kip<Ksp, then solution is unsaturated:

   a) unsaturated b) saturated c) super saturated d) none

9. This is anything unwanted which precipitates with the analyte during precipitation

   a) Postprecipitation b) Coprecipitation c) Preprecipitation d) Occlusion

10. Diphenylamine in conc sulphuric acid is ……. in reduced form

    a. Violet b) pale blue c) colorless d) orange

Multiple Choice Questions' Answer Sheet

Code No. _____ Marks Secured: _____

In Words: _____

Examiner's Sign: _____ Date: _____

Scrutinizer's Marks: _____

In Words: _____

Scrutinizer's Sign: _____ Date: _____

Corrected Fill Ⓐ ● Ⓒ Ⓓ

Incorrected Fill Ⓐ Ⓑ ● ✓Ⓓ

1.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	6.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	7.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	8.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	9.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
5.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	10.	Ⓐ	Ⓑ	Ⓒ	Ⓓ

MANMOHAN TECHNICAL UNIVERSITY

Office of the Controller of Examinations

Budiganga- 4, Morang, Koshi Province Nepal

Faculty: Medicine and Allied Health Sciences **Year/Part: II/I**

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- ✓ *Group A contains Multiple Choice Questions of 5 marks.*
- ✓ *Candidates are required to give their answers in their own words as far as practicable.*
- ✓ *The figures in the margin indicate Full Marks.*
- ✓ *Assume suitable data if necessary*.

Group B (Problem-Based Question) **[1×10=10]**

1. An analyst while performing wanted to know the concentration of sodium hydroxide solution he had prepared. To find this he used standard 0.1N HCl and performed the titration filling the burette with HCl and taking 20 ml of NaOH solution and 2 drops of phenolphthalein in conical flask. He found out the volume of HCl consumed to reach endpoint was 10 ml.
   a) Define neutralization reaction and neutralization curve. Calculate the normality of NaOH (4)
   b) Write short notes on titration between strong acid and strong base .(5)
   c) Define common ion effect. (1)

Group C (Long Answer Questions: Attempt Any Four) **[4×5=20]**

1. Describe different Impurities in Precipitates of Thermogravimetric analysis
2. Define error. Describe various types of errors occurring in analysis.
3. Discuss the method for determination of chloride of ORS by precipitation titration.
4. Write down the various theories of indicators.
5. Write down method for analysis of copper sulphate by redox method

Group D (Write Short Notes: Any Five) **[5×2=10]**

1. Define iodimetry and iodometry
2. Define thermogravimetric analysis
3. Write down any four rules of significant figures.
4. Calculate the amount of copper sulphate to prepare 50 ml of 5% copper sulphate soluition in water.
5. Write down limitations of Arrhenius concept of acids and bases
6. Short notes on theory of redox titration

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- The End -