

<b>SEMESTER</b>	<b>III</b>	<b>QP CODE</b>	<b>23ANCH31</b>
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**P.R. GOVERNMENT COLLEGE (AUTONOMOUS), KAKINADA**  
**SEM END EXAMINATIONS NOV -2024**  
**II B.SC ANALYTICAL CHEMISTRY: QUANTITATIVE METHODS OF ANALYSIS**

**TIME: 2 HRS**

<b>DATE &amp; SESSION</b>	15.11.24 & AN	<b>REG NO</b>									<b>MAX MARKS</b>	<b>50</b>
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**SECTION-I**

**Answer any THREE of the following questions. And attempt one question from Each section**  
**part Each question carries TEN marks** **3X10=30Marks**

**PART-A**

- Specify the principles of Volatilization methods. How do you determine the Sodium Bicarbonate ( $\text{NaHCO}_3$ ) content of Antacid tablets by using volatilization method? BT2, CO1, PO3
- Evaluate the properties of precipitates and precipitating reagents. BT3, CO1, PO4
- What is an Indicator? List out the various theories of Indicators. BT1, CO2, PO1

**PART-B**

- By using the concept of centrifugation, Explain different types of centrifugations techniques. BT2, CO3, PO3
- Explain about different types of rotors. BT1, CO3, PO1
- Develop the process to determination of Cu and Zn in brass by using Polarography technique. BT4, CO4, PO5

**SECTION-II**

**Answer any FOUR of the following questions. Each question carries FIVE marks**

**4 X 5=20Marks**

- Evaluate the concept involved in Colloidal precipitates. BT3, CO1, PO2
- What is Buffer? Explain briefly about Buffer solutions. BT1, CO2, PO1.
- Explain briefly about Complexometric and Redox titrations with examples. BT1, CO2, PO1.
- Write about sedimentation. BT1, CO3, PO1
- Explain briefly about Water analysis. BT1, CO3, PO1
- Write the advantages and disadvantages of DME BT1, CO4, PO1
- Explain about residual current and migration current BT1, CO4, PO1.