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No.:

G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.



UG DEGREE END SEMESTER EXAMINATIONS - APRIL 2025.

(For those admitted in June 2023 and later)

PROGRAMME AND BRANCH: B.Sc., CHEMISTRY

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
IV	PART-IV	SEC - 6	U23CH4S5	INSTRUMENTAL METHODS OF CHEMICAL ANALYSIS

Date &amp; Session: 06.05.2025/AN

Time: 2 hours

Maximum: 50 Marks

Bloom's K-level	Q. No.	<p><b>SECTION – A (5 X 10= 50 Marks)</b>  <b>Answer <u>ALL</u> Questions choosing either (a) or (b).</b></p>
K5	1	<p>Explain with example 1) moles 2) millimole 3) milliequivalent 4) normality.</p> <p><b>(OR)</b></p> <p>Explain F-test and Significant figures with examples.</p>
K4	2.	<p>List the components of an Atomic Absorption Spectrophotometer, and how do they work together?</p> <p><b>(OR)</b></p> <p>Examine how different methods of background correction in AAS influence the detection limits and sensitivity of the instrument.</p>
K5	3.	<p>Explain the principle and instrumentation of UV visible spectroscopy.</p> <p><b>(OR)</b></p> <p>Explain the sampling technic and instrumentation of double beam IR spectrometer with a neat diagram</p>
K5	4.	<p>Evaluate how the instrumentation of TGA, as represented in the block diagram, influences the accuracy and precision of thermal analysis</p> <p><b>(OR)</b></p> <p>Evaluate how the principle of polarography influences the accuracy of electrochemical analysis in different experimental setups.</p>
K4	5.	<p>How does the principle of HPLC explain variations in retention time when different elution techniques are applied?</p> <p><b>(OR)</b></p> <p>Analyze how the principle of thin layer chromatography (TLC) helps in the separation of different compounds.</p>

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