

**ANALYTICAL CHEMISTRY (BS-ADP 7<sup>th</sup> Semester)**

<b>Module Code:</b>	<b>Chem-425</b>
<b>Module title:</b>	<b>Analytical Chemistry Lab - II</b>
<b>Name of Scheme:</b>	<b>BS-ADP 7<sup>th</sup> Semester</b>
<b>Department:</b>	<b>School of Chemistry</b>
<b>Faculty:</b>	<b>Science</b>
<b>Module Type:</b>	<b>Compulsory</b>
<b>Module Rating:</b>	<b>1 credit</b>

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**OBJECTIVES:**

The students will be able to prepare the solutions of various concentrations. They will understand the use of atomic spectroscopic techniques for the practical determination of various elements in the given samples. They will also learn how to use the molecular spectroscopy and obtaining the valuable information.

**SYLLABUS OUTLINE:**

**1. Flame Emission / Spectrophotometry:**

Determination of Sodium in tap water by using Flame Photometer.

Determination of Potassium in tap water by using Flame Photometer.

Find out the calcium in chalk sample by flame photometry.

Determination of Ba by flame photometry.

Estimation of purity of various compounds on the base of flame emission Spectrophotometry.

Indirect determination of various compounds by flame photometric techniques.

**2. Atomic Absorption/ Spectrophotometry:**

Determination of Fe, Pb, Cd, Zn and Cu in soil samples by AAS technique.

Preparation of standard calibration graphs of Pb, Cd, Zn and Fe by AAS.

**RECOMMENDED BOOKS:**

1. Vogel's, s text book of quantitative inorganic analysis by J. Bassett. The English language book Society and Longman