

APPLIED CHEMISTRY (BS-ADP5th Semester)

Module Code:	Chem-314
Module title:	Allied Chemical Industries
Name of Scheme:	BS-ADP 5th Semester
Department:	School of Chemistry
Faculty:	Science
Module Type:	Optional
Module Rating:	2 credits

OBJECTIVES

It will help the students to understand the working in Allied Chemical Industries starting from raw material to end finished product.

SYLLABUS OUTLINE:

1. Cement Industries:

Glossary of Cement Terms, Raw materials used for cement manufacturing, Dry process and Wet process, Semi-wet process, Types of Cement, Hydration of Cement, Properties of Cement, Testing of Cement, and Allied Cementing materials

2. Glass and Ceramics:

Glass – Physical and Chemical properties of glass, types of glass, raw materials used for glass, manufacturing of special glass.

Ceramics – Classification and properties of ceramics, raw materials, manufacturing of ceramics, application of colors to pottery, refractory.

RECOMMENDED BOOKS:

1. Applied Chemistry, Haq Nawaz Bhatti and Muhammad Salman, 2017, Caravan Book Publisher, Pakistan.
2. Industrial Organic Chemicals, by H.A.Witcoff and B.J.Reuben, John Wiley & Sons Inc. New York.
3. Hand Book of Industrial Chemicals, By SIRI Board of Consultants and Engineers,
4. The Chemistry of Cement, H.F.W. Taylor, Academic Press, London, 1964.
5. Shereve's Chemical Process Industries, 5th Ed.1975 by G.T.Austin McGraw Hill Book Co. New York.
6. Industrial chemistry, B. K. Sharma Krishna Prakashan Media (P) Ltd., Ed-15 (2006)
7. Chemistry of glass manufacturing, F.W.Hunter, Dower Publications, New York, 1950.