

# ADMISSION GUIDE

## FALL 2021



THE  
UNIVERSITY OF  
LAHORE

## Department of Chemistry

**For Inquiry:**  
**Admission Office:**

**UAN: 042 111 865 865**

1-Km Defense Road, Off Raiwind Road, Near Bhotian Chowk Lahore.

Web: [www.uol.edu.pk](http://www.uol.edu.pk) Email: [admissions@uol.edu.pk](mailto:admissions@uol.edu.pk)

**Program Name:** **Bachelor of Science in Chemistry (After 12 years of Education)**  
**Program Eligibility:** Minimum (45%) 12 years of education/ F.Sc. / A-Levels with chemistry as one of the major subjects.  
14 Years of Education, 2 Years B.Sc. Chemistry, 4 Years BS Chemistry or equivalent degree (Chemistry as a major subject) with Minimum 2.5/4.0 CGPA in semester system or 2nd Division in annual system.  
A fast track enrollment is allowed in 5<sup>th</sup> semester along with 4-year BS Chemistry program upon successfully completion of bridging courses of 18 credit hours  
**Program Duration:** 4 Years (08 semesters)

**Program Name:** **Master of Philosophy in Chemistry (M.Phil.)**  
**Program Eligibility:** Minimum 45% (in the Annual System) or 2.50 /4.00 CGPA (in the Semester System). 16 years of education in Chemistry BS 4 years degree program (128+ credit Hours), M.Sc. 2 years – 2nd division in the annual system or 2.5/4.0 CGPA in the semester system from HEC recognized University/Institute.

**Entry Requirement:** **For M.Phil.,** Minimum 50% marks in UOL Entrance Test plus Interview.  
**For BS programs:** Interview / Test (If Any)

\* The final List of successful candidates will be made on the basis of students' Academic marks, Entry Test marks and interview according to UOL policy.

**Program Name:** **Doctor of Philosophy in Chemistry (Ph.D.)**  
**Program Eligibility:** 18 Years of Education, MS/MPhil or Equivalent degree from HEC recognized university with minimum 3.00/4.00 CGPA in semester system or 60% marks in annual system.

**Program Duration:** **3 Years** (06 semesters)  
Note: Test and Interview both are mandatory, 70% passing marks

**Admission Requirement:** Qualify UOL Entrance Test / Interview

**Classes Timing:** **Weekdays-1-Morning**–Monday to Friday (8:00am to 5:00pm) for BS Chemistry.  
**Weekend**-Afternoon-Saturday (2:00 pm to 9:00 pm) & Sunday (8:00am to 8:00pm)  
for M.Phil. & PhD programs and BS after 14 years of Education or as prescribed by the Department.

**Recognized By:** **Higher Education Commission**  
**Specializations:**  
**Organic Chemistry • Physical Chemistry • inorganic Chemistry**  
**Analytical Chemistry • Applied chemistry**

# Guidelines for the Admission Test of M.Phil. Chemistry

## Overview

- The test consists of 100 multiple-choice questions.
- Test questions are constructed to simplify mathematical manipulations. As a result, neither scientific calculators nor electronic devices are usually needed.
- The major part of the test emphasizes the four fields into which chemistry has been traditionally divided (Organic, Inorganic, Physical, Analytical and Applied), and some interrelationships among the fields. Because of these interrelationships, individual questions may test more than one field of chemistry.

## Content Specifications

**I. Organic Chemistry — 20%**

**II. Inorganic Chemistry — 20%**

**III. Physical Chemistry — 20%**

**IV. Analytical Chemistry --- 25%**

**V. Applied Chemistry— 15%**

## Sample:

1. Elements which are good catalysts and have ability to change their oxidation number are,  
A. Transition elements      B. Nobel gases      C. Alkalis      D. All of them
2. Which of the following form most water soluble hydroxides?  
A.  $K^+$       B.  $Ni^{+2}$       C.  $Zn^{+2}$       D.  $Al^{+3}$
3. In terms of the “collision of chemical kinetics”, the rate of a chemical reaction is proportional to:  
A. The change in free energy  $s^{-1}$       C. The number of collision  $s^{-1}$   
B. The change in temperature  $s^{-1}$       D. The number of product molecules
4. Which one of them does not represent Arrhenius Equation?  
A.  $K = Ae^{-E/RT}$       C.  $K = AE^{-RT}$   
B.  $\log_{10}K = \log_{10} A - E/RT$       D.  $\log_e K = \log_e A - E/RT$
5. A device in which incident radiation is converted to electric current is called:  
A. A phototube      B. An ammeter      C. An amplifier      D. A voltaic cell
6. Ion exchange chromatography falls into which of the following categories?  
A. Liquid-solid      B. Gas-solid      C. Solid-solid      D. Liquid-liquid      E. Gas-liquid