# DEPARTMENT OF MATHEMATICS,

# UNIVERSITY OF KARACHI,

## **Course Outline**

#### **MATH 644: COMPLEX VARIABLE - II**

#### Course contents:

Meromorphic functions. Navanlinnas fundamental theorems. Deficient values and functions, derivatives and exceptional theorems of Polya.

#### **Books Recommended:**

- 1. Boas, R. P., Entire Functions, Academic Press, 1989.
- 2. Hayman, W. K., Meromorphic Functions, C.U.P., 1960.
- 3. Titohmarsh, E. C., Theory of Function, C.U.P., 1987.
- 4. Markushevick, A. I., Theory of Functions of a Complex Variable, Vol. II, Prentice Hall, 1965.
- 5. Jeffrey, A., Complex Analysis and Application, Second Edition, Chapman and Hall/CRC, New York, 2006.
- 6. Sharma, S. C., Complex Integration, First Edition, Discovery Publishing House, New Delhi, 2007.