# **Lectures on Number Theory**

(Online Mode)

(August 10 – 13, 2023)

by

Prof. Takao Komatsu





# **Organized** by



Department of Mathematics SLIET Longowal – 148106 (Punjab)

#### **INTRODUCTION OF SPEAKER**

Prof. Komatsu is working at Department of Mathematical Sciences, Zheijang Sci Tech University, Hangzhou, China. His research interests are Analysis, Algebra, Number Theory etc. He has nearly 300 papers to his credit and has delivered more than 100 lectures on different areas of mathematics.

#### PROSPECTIVE PARTICIPANTS

This workshop is open for participants from Academic Institution Faculties, Ph.D. Scholars, Industries, PG and UG students. There is no registration fee for workshop. The participants can register using the link:

https://forms.gle/2aW1HQ6YreMi99UH7

Time: 10:00 AM onwards (Daily)

### **CHIEF PATRON**

Prof. Mani Kant Paswan, Director, SLIET

### **PATRON**

Prof. J.S. Dhillon, Dean Academics, SLIET

#### **CHAIRMAN**

Prof. V.K. Kukreja, SLIET Longowal

#### **ORGANISING SECRETARIES**

Dr. Yogesh Kapil, SLIET Longowal Dr. Sudhir Kumar, SLIET Longowal

## **COURSE OBJECTIVES**

The workshop shall provide a deep insight into some of the easiest to state, yet painfully hard problems in number theory. One such problem is the Frobenius coin problem, which has been an active area of research for a long time. We are delighted to welcome Prof. Takao Komatsu who has done some amazing work on this problem for over two decades and will be sharing some of his enlightening research work and amazing techniques with us here.

## **TOPICS TO BE COVERED**

For the PG and PhD students of the SLIET, the lectures will be held in HS-8, Science Block and will be live streamed for outstation participants via Google Meet.

**E-Certificates** will be issued to participants after successful completion of the course.

Lecture Series will focus on following topics:

- Linear Diophantine equations
- Frobenius coin problem
- Generating Functions
- Generalizations of Frobenius numbers
- Solutions of linear Diophantine equation
- Square Frobenius numbers
- P-Frobenius numbers
- Weighted Sylvester sums