

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

CERTIFICATE

This is to certify that the thesis titled “**Modelling and Analysis of Various Characteristics of Interacting Populations with Discrete Delay**” submitted by **Mr. Ankit Kumar**, ID No. **2016PHXF0412P** for the award of Ph.D. of the institute embodies original work done by him under my supervision.

Signature of the Supervisor

Name: **PROF. BALRAM DUBEY**

Designation: **Professor**

Date: **26 July 2021**