

**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI
(RAJASTHAN)**

CERTIFICATE

This is to certify that the thesis titled “**Optimal Control of Queueing Models in Service and Machining Systems: A Nature-Inspired Approach**” submitted by **Mr. Shreekant Varshney**, ID No. **2014PHXF0417P** for the award of Ph.D. of the institute embodies original work done by him under my supervision.

Signature of the Supervisor

Name: **DR. CHANDRA SHEKHAR**

Designation: **Associate Professor**

Date: