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

## CERTIFICATE

This is to certify that the thesis titled **"Boundary-Layer Resolving Numerical Methods for Time-Dependent Singularly Perturbed Parabolic Initial Interval/Boundary Value Problems"** submitted by  **Parvin Kumari**, ID No. **2015PHXF0409P** for the award of Ph.D. of the Institute embodies original work done by her under my supervision.

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Signature of the Supervisor
Name: **PROF. DEVENDRA KUMAR**
Designation: **Associate Professor**