

ON CERTAIN SUMMATION-INTEGRAL TYPE OPERATORS

Ph.D. Thesis

**Submitted in fulfilment of the
requirements for the award of the degree**

of

DOCTOR OF PHILOSOPHY

in

MATHEMATICS

By

ALI JASSIM MOHAMMAD



**DEPARTMENT OF MATHEMATICS
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE-247 667, INDIA**

August-2003