

CERTIFICATE

It is certified that the work contained in the thesis titled " *MODELLING AND ANALYSIS OF DRAGLINE BUCKET*" by *SHAH FATEH AZAM* has been carried out under my/our supervision and that this work has not been submitted elsewhere for a degree.

It is further certified that the student has fulfilled all the requirements of Comprehensive, Candidacy and SOTA.

Piyush Rai

(Supervisor and Head of Department)