

CERTIFICATE

This is to certify that the research work embodied in this thesis entitled “**Insight into castasterone mediated physiological and biochemical changes in *Brassica juncea* L. plants grown under Cu stress**” submitted to the faculty of Life Sciences, Guru Nanak Dev University, Amritsar, for the award of degree of **Doctor of Philosophy** has been carried out by **Ms. Poonam** at the Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar under our supervision. This is a bonafide work and has not been submitted in part or full for any other degree/diploma to this or any other University/Institute. The thesis is fit to be considered for evaluation for the award of degree of Ph. D.

[Prof. (Dr.) Renu Bhardwaj]
Supervisor

(Dr. Geetika Sirhindi)
Co-Supervisor