

CERTIFICATE OF THE SUPERVISOR

This is to certify that the thesis entitled “NONLINEAR STUDIES OF TIME SERIES OF STOCK PRICES AND INDICES - APPLICATION OF PHYSICS TO FINANCIAL SYSTEMS” is a piece of work carried out by Mr. BAL GOPAL SHARMA under my Guidance and Supervision for the award of the degree of Doctor of Philosophy in Physics MATS University Raipur (C.G.). Further, it is certified that the candidate has put in an attendance of more than 200 days with me.

To the best of my knowledge and belief the thesis,

- (1) Embodies the work of the candidate himself;
- (2) Has duly been completed;
- (3) Fulfills the requirements of the ordinance relating to the Ph. D. Degree of the University: and
- (4) Is up to the standard both in respect of content and language for being referred to the examiners.

Signature of the Supervisor

(Dr. D.P. Bisen)