

**ESTIMATION OF TOTAL FACTOR
PRODUCTIVITY ON INDIAN RAILWAYS
- A COST FUNCTION APPROACH**

**BY
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**THESIS SUBMITTED FOR
THE DEGREE OF
DOCTOR OF PHILOSOPHY**



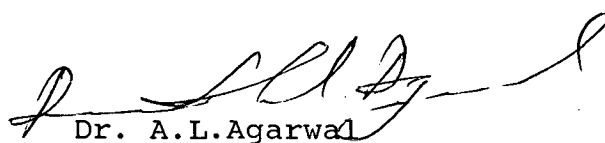
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CERTIFICATE

Certified that Mr. Y.B.Sharma, was permitted to work for his Ph.D. Degree in Economics at the I.I.T., Delhi on the problem entitled "ESTIMATION OF TOTAL FACTOR PRODUCTIVITY ON INDIAN RAILWAYS - A COST FUNCTION APPROACH". He has faithfully carried out his study under my guidance and supervision and the accompanying thesis is his genuine and original work.

Mr. Y.B.Sharma has completed necessary course work and put in the required attendance in this Department.



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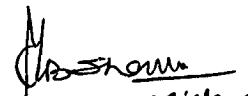

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