

## **CERTIFICATE**

This is certify that the thesis, entitled “**Production, Purification and Characterization of Xylanase from *Bacillus subtilis* and its applications**” submitted to the Bharathiar University, in Partial fulfillment of the requirements for the award of the Degree of **Doctor of Philosophy in Botany** is a record of original research work done by **Mrs. R.Usha** during the period 2009-2016 of her research in the Department of Botany at P.S.G.R.krishnammal College for Women under my supervision and guidance and the thesis has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or other similar title of any candidate of any University.

**Countersigned**

**Head of the Deapartment**

**Signature of the Guide**

**Signature of the Principal**

## **DECLARATION**

I , **R.Usha** hereby declare that the thesis, entitled “**Production, Purification and Characterization of Xylanase from *Bacillus subtilis* and its applications**” submitted to the Bharathiar University, in Partial fulfillment of the requirements for the award of the Degree of **Doctor of Philosophy in Botany** is a record of the original research work done by me during 2009-2016 under the Supervision and Guidance of **Dr.V.Sashi, M.Sc., M.Phil., Ph.D.**, Associate Professor, Department of Botany and it has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or other similar title to any candidate in any University

**Signature of the Candidate**