

CERTIFICATE

This is to certify that the dissertation entitled "**Synthesis, Characterization of zinc oxide nanoparticles using *Asclepias gigantea* leaf extract and its application in the photo-catalytic dye degradation from textile industrial waste water effluent**" submitted to the Karpagam Academy of Higher Education in partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Biotechnology** is a bonafide record of original research work done by **Mr. Ananda kumar. S (17BTU109)** during the period 2019-20 of their study in the Department of Biotechnology at Karpagam Academy of Higher Education, Coimbatore, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree/Diploma/Associate/Fellowship or similar title to any candidate of any University.

**Signature of Head of the Department**

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