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CERTIFICATE

The research work embodied in this thesis entitled “*Bisnucleophilic Substitution*’ as the synthetic tool for the ready access to some piperidine alkaloids (+)-coniine, (+)- β -conhydrine , (+)-8-ethylnorlobelol and (-)-8-*epi*-halosaline; Total synthesis of bioactive natural products: (6*Z*,9*S*)-3,4-*trans*-9-hydroxy-3-methyldodec-*cis*-6-en-4-olide and (6*Z*)-3,4-*trans*-9-oxo-3-methyldodec-*cis*-6-en-4-olide γ -butyrolactones; and Passerini multicomponent reactions using Sugar derived chiral isonitriles” has been carried out under my supervision and is bonafied work of **Mr. RAJU GALLA**. This work is original and has not been submitted for any other degree or diploma of this or any other University.

Date:

Hyderabad

(Dr. P. Radha Krishna)

Research Supervisor