

DECLARATION

I, **Manisha Sheoran (181050W001)** certify that the work embodied in this pre-submission report of my Ph.D. thesis is my own work carried out from **2019** to **2022** at the **School of General Education** in (**Chemistry discipline**) of Bhartiya Skill Development University. The matter embodied in this Ph.D. thesis has not been submitted for the award of any other degree. I declare that I have faithfully acknowledged, given credit to, and referred to the research workers wherever their works have been cited in the text and the body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results, etc. reported in the journals, books, magazines, reports, dissertations, thesis, etc. or available at websites and included them in this Ph.D. thesis as my own work.

Date:

Signature:

Name of Candidate: Manisha Sheoran

Place: Jaipur

Certificate from the Supervisor

This is to certify that the above statement made by the candidate is correct to the best of my knowledge. The research work embodied in the thesis was carried out under my supervision and the candidate has worked under me for the period required under the regulations.

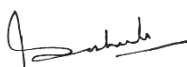
Supervisors Signature:

Name: Dr. Pancham Kumar

Designation: Assistant Professor (School of Electrical Skills, BSDU, Jaipur)

Co-Supervisors Signature: |

Name: Dr. Susheela Sharma



Designation: Registrar (SRHU, Dehradun)