METHODOLOGY AND WORK PLAN

Work will be divided in the span of every half year. Total 6 half years will be utilize for this research work to be submitted.

1st - 6 months

1. Review of literature
   a. From the date of registration we will interact with the guide frequently for the discussions on various activities.
   b. We will visit various research laboratories in our district for finalization of carrying out research work.
   c. We will collect research papers on the same topic to get reviews and updation.
   d. E- Journals will be studied in libraries of Colleges and research Centre.

2nd - 6 months

1. Sample Collection
   A) At least three water bodies will be selected for the studies which may be at minimum distance of 5-10 km from each other.
   B) Each of the selected water bodies will be visited at regular time interval of every month.
   C) Study and Analysis of water samples for physico chemical parameters using physical testing and chemical testing will be done.
   D) Also some trace metals, fertilizers and other materials will be detected.

2. Digital photography of selected spot and water samples will be carried out

   Physical testing includes.
   A. Colour
   B. Suspended matters (TSS).
   C. Temperature
   D. Turbidity (using turbidity)

   Chemical testing includes
   A. pH using pH meter.
B. Electrical conductance using conductivity meter
C. Dissolved oxygen using winkler method
D. Ca and Mg by complex metric titration using EDTA & Eriochrom black T
E. Na and K by flame photometer
F. Alkalinity using acidimetric titration.
G. Chloride using titrimetricaly using AgNo₃ and K₂CrO₄
H. Sulphate using colourmetrically.
I. F using spectro photometer
J. Nitrogen using colourimetric method.
K. Heavy metal (Cd, Zn, Pb, Fe, Co, Ni, Mo) by atomic absorption spectro photometric method.

3rd - 6 months

1. Detail study of trace metals, fertilizers, and other materials found and their effect on vegetation as well as on aquatic animals.

4th - 6 months

1. Compliance of research work done in rough and to be finalized by Guide.
2. Compliance of research work done in Final and to be in process to submit in University for the award of degree.
3. Final Thesis to be submitted for the award of degree.