Methodology of Research

In order to achieve our desired objectives we shall plan to have a combination of various research methodologies involving aspects of empirical research like that of the observation of historical data and thereby involving analytical research in the descriptive form and further using the comparative methods to justify the research outcome accordingly.

1. Choose a particular geographical domain of study and get secondary data with Reference to the tropical cyclone occurrence in that area.

2. Study the various parameters responsible for the occurrence of these graphs and further develop them as per the graph theory also identify key factors that are responsible for occurrence of cyclone over a period of time.

3. Identify the flow of use of various mathematical theories that can be useful to study such factors under parameterizes graph theory to achieve similarity of results.

4. Develop these parameterized graphs in order to materialize the study of tropical cyclone and collate the results according to regression analysis techniques.

5. Fit the arboricity of the network graph theory and regression forms developed under various parameters in order to have expected results for the historical data over the same geographical domain.

6. Synchronize a precise pattern of this developed mathematical theory for tropical cyclone to check for credibility over another geographical domain.

7. Synchronize the results and use the patterns for studying climatology over various other geographical domains.
WORK PLAN:

**I Year: During this period following work will be done.**
1) Course work and survey of literature. (5-6 month)

2) Study various graphical patterns relevant to climate change like the effect of Psychrometricmeterology to fulfill the given objective. (3-6 month)

**II Year: During this period following work will be done.**
1) Will find out cause and effect of various fluctuations between the ocean and atmospheric condition (2-3 weeks).
2) Will describe graph theory over a parameterized graph (1-2 months).
3) Will find out the pattern of different other catastrophe happening during the cyclone and form its graphs. (3 months).
4) Will study and analyze the cyclonic behavior and its changes with respect to time & landslide. (1 month).
5) Will work on cyclone pattern, medieval period of October-January and effect of occurrence probability further explore the network parametric graph based on these events (2 months).
6) Presentation of research work in seminars (2 months).
7) Publishing the research work in various journals (2 months).

**III Year: During this period following work will be done.**

1) Compilation of research work (3-6 months.)
2) Summary submission
3) Pre thesis presentation.
4) Thesis Submission
5) Preparation for Viva.