RESEARCH METHODOLOGY:-

Multiple methods will be used to conduct the research work mentioned above, ranging from simulation to proof of concept implementation. Specifically, the following approaches will be used in each of the research topics.

*Define problem statement:* Based on my research interests, I have identified different technologically challenging problems in the domain of Mobile Ad hoc Networks

*Identify objectives in lieu with the problem statement:* Based on the problem statement we have identified a set of objectives that needs to be achieved in order to mitigate the technical challenges of routing in Mobile Ad hoc Networks.

*Perform comprehensive literature survey:* We intend to carry out a detailed literature survey to access the shortcomings in the existing routing protocols. Comparison of existing protocols and their performance in Mobile Ad hoc Networks will be studied in detail.

*Selection of appropriate tools and technologies that syncs with the ideas:* Various concepts of Mobile Ad hoc Networks can be studied, implemented and analyzed using simulation tools.

*Implement the work using appropriate tools:* Once the tools are decided for different requirements like protocol performance evaluation work can be implemented.

*Publish papers in reputed International Journals and Conferences:* Publishing our findings in research papers forms a core part in getting our work recognized among our peers.

*Thesis writing and reviews:* I intend to start writing at this stage as substantial amount of work will be completed including publications. I also plan to get my thesis reviewed by my guide as the work progresses.

*Prepare PPT slide deck for presenting the work:* I intend to present my work to the intended audience in a clear and concise manner to the best of my ability.

7..WORK PLAN:

1. Define problem statement
2. Identify objectives in lieu with the problem statement
3. Perform comprehensive literature survey
4. Ascertain whether the objectives can be achieved by performing feasibility study
5. Recognize the assumptions and limitations needed to implement the concepts specified in objectives.
6. Selection of appropriate tools and technologies that syncs with the ideas
7. Implement the work using appropriate tools
8. Publish papers in reputed International Journals and Conferences
9. Thesis writing and reviews
10. Prepare PPT slide deck for presenting the work