Basic Record and Field Book/Lab Book

They are the permanent record of your work and hence should contain all the works related to the project. Basic Record is the whole systematic record of the work/study/project in full detail. Field book/lab book is for your daily use in the lab/field and for rough works, calculations, plan schedules, memoirs, etc. You should record your work in these books systematically and regularly. All the experiments conducted in the lab must be recorded in these books. It is a compilation of whole work done by the researcher, so it must be well maintained. Also it can be a good reference book for those who come along. These are the property of the research station and hence you are not supposed to keep those books in your home. When you resign from the job you should submit them up-to-date to the lab in charge without any delay.

You should note the following points while dealing with field book.

1. Keep the book neat and tidy.
2. Utilize the book efficiently preserving the legibility of your writing.
3. Name of the experiment should be entered along with the date of carrying out that experiment.
4. Next you mention the requirements for the experiment.
5. Summarize the theory and principle. This should be followed by the procedure.
6. Mention the general calculations for the experiment. It should contain all the related works of the project for which it is meant to.

The following points are to be taken care of:

1. Do not tear pages from the field book. Number the pages of field book.
2. Do not over write if a mistake has been committed in recording, put a line over it and write the correct word again.
3. Complete the index, indicating the experiment, its serial number, page number on which it is written.
4. The notebook should always be up to date and may be collected by the lab in charge at any time.
5. You have to submit the field book and basic record at the end of every month on the date assigned.

Mandatory Details Required the Basic Record

1. **Index**: An index containing the title of each experiment with page number and Sl. No.
2. **Brief title of the experiment and date**: Every experiment should have a descriptive title.
3. **Aim**: A clear objective should be there.
4. **Principle**: This section includes the scientific concept or theory involved in the experiment.
5. **Materials Required**: This section should include any materials required and reagent composition.
6. **Procedure**: This section includes the stepwise protocol and formulae. Procedure in the form of flow charts is helpful if it involves several parts. If an experiment is a repeat of an earlier experiment, you do not have to write down each step, but can refer to the earlier experiment by page or experiment number. If you make any changes, note the changes and reasons why.
7. **Observations**: Periodical or quantitative or qualitative observations
8. **Results**: This section should include the final result of the experiment in accordance with the aim, organized in statistically valid tables and figures and discussed logically and justifiably. All raw data, including gel photographs, printouts, graphs, autoradiographs, etc if present are to be included.
9. **Inference**: The results obtained should be interpreted in accordance with the principle of the experiment.
10. **Future Line**: This section includes any suggestions from the protocol done, any refinements required etc. It is mandatory to have clear and accurate records of all experiments conducted in the laboratory.