Chapter-3
Research Methodology

Research methodology is a way to systematically solve the problem. It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them. The scope of research methodology is wider than that of research method.

Universe of the Study: - Universe of the study is the employees of Panipat Thermal Plant, Panipat.

Problem Statement: - The employees of any organization are the active resources. The interpersonal relations are becoming more and more complex at work place. Employees are aware about their rights of workplace. So, it is difficult to satisfy their requirements and also it is difficult to boost their morale. So, this study will throw light on the hygiene and motivational factors relating to welfare schemes.

Research objectives

1. To analyze the welfare schemes adopted by the organization.

2. To study the hygiene and motivational factors relating to welfare of employees.

3. To suggest the various other measures which can be adopted to improve the performance of the employees.

Scope of the study:-
The scope of the study is limited to the employees of Panipat Thermal Plant, Panipat.
TYPE OF RESEARCH ADOPTED

Descriptive Research:-

It includes surveys and fact-finding enquiries of different kinds. It is undertaken in many circumstances, when the researcher is interested in knowing the certain characteristics of different group; interested in knowing the proportion of in a given population who have behaved in a particular manner or determining the relationship between two or more variables. Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied. Descriptive research answers the questions who, what, where, when and how.

Although the data description is factual, accurate and systematic, the research cannot describe what caused a situation. Thus, descriptive research cannot be used to create a causal relationship, where one variable affects another. In other words, descriptive research can be said to have a low requirement for internal validity. Often the best approach, prior to writing descriptive research, is to conduct a survey investigation. Qualitative research often has the aim of description and researchers may follow-up with examinations of why the observations exist and what the implications of the findings are.

SOURCES OF DATA COLLECTION:-

The data collection process follows the formulation of research design including the sample plan. After the research problem has been identified and selected the next step is to gather the required data. While taking a decision regarding the method of data collection to be used for I have taken both types of data i.e. Primary and Secondary data. The primary data consists of a well designed questionnaire to be filled in by the employees of Panipat Thermal Plant.. The secondary data includes the various websites through internet access and the books and journals available for data collection.

Collection of Primary data is to be done with the help of:

- Interview Method
- Structured Questionnaire

Collection of Secondary data is done with the help of:

- Company Brochures
- Company Journals
The data collected through Questionnaire method has been cost effective. An integral component of a research design is the sampling plan. Specially, it address three questions: whom to survey (the sample unit), how many to survey (the sample size), and how to select them (the sampling procedure). Making the census study of the entire universe will be impossible on the account of limitations of time and money. Hence sampling becomes inevitable. A sample is only the portion of the population. Properly done, sampling produces representative data of the entire population.

**Sample selection:-**
Sampling may be defined as the selection of some part of an aggregate or totality on the basis of which a judgment or inference about the aggregate or totality is made. In simple words, it is the process of gathering useful information about a population for obtaining the desired results by mere examining a part of it.

**Sampling Unit:-**
It defines the target population i.e. it answer who is to be surveyed. In this study, the sampling unit is employees of the Panipat Thermal Plant.

**Sampling Size:-**
It is necessary to see the organization is large or small. Panipat Plant is a large organization. Since the size of employees in the organization is large enough, it is very difficult to interview all the employees in the organization. Sampling size indicates the numbers of people to be surveyed. Though large samples give more reliable results than small samples but due to constraints of time and money, the sample size will be restricted to 150 respondents.

**Method of sampling Design:-**
The Sampling method used here is Non-Probability Sampling in which Convenience Sampling has been used. Convenience sampling sometimes called grab or opportunity
sampling, is the method of choosing items arbitrarly and in an unstructured manner from the frame. Though almost impossible to treat rigorously, it is the method most commonly employed in many practical situations. Under Judgmental sampling or Purposive sampling researchers chooses the sample based on who they think would be appropriate for the study. This is used primarily when there are a limited number of people that have expertise in the area being researched.

**Tools and Techniques:-**

On the basis of the data/ information so collected from the various sources, the tabulation, analysis and interpretation is made to make the study more meaningful. All relevant mathematical and statistical tools such as averages, percentages, trend analysis and ratio analysis etc. is used to complete the purpose of the study. The use of index, tables, charts, graphs and diagrams etc. is made whenever it is needed and necessary for clarity of thoughts, easy understanding and to make the presentation of research more simulative. Since the study is based empirically on secondary data, it is also involve maximum deskwork to consolidate the available information.

The data collected in the aforesaid manner have been tabulated in condensed form to draw the meaningful results. The different techniques are adopted to analyze the data. All the data and material is arranged through internal resources and the last part of the project consists of the conclusions drawn from the report, a brief summary and recommendation are giving the final touch to the dissertation by stating a conclusion.

**Structured Questionnaire:-**

The primary data has been collected through structured questionnaires, which were administered to the respondents.

**Research Limitations:-**

1. Due to time constraint the sample size 150 has been taken.

2. The respondents were unwilling to give a complete and accurate response to certain questions.
3. Convenience Judgment Sampling was used as the mode of conducting the research.

4. Respondents may not have been true in answering various questions and may be biased to certain questions.

5. Respondents were reluctant to answer some questions, therefore increasing the possibility of error.

6. The chances of personal prejudice are possible at respondent level.

7. Most of employees are busy at their work they may not have time to give all response.

**Relevance of the study:-**

This study may be useful to the management in the Panipat Thermal Plant, Panipat. It will help in identifying the shortcomings in the facilities provided for employees welfare in the Thermal Plant. This study will also help the thermal Plant to make some effective strategies to provide good working conditions to their employees.