3.1 INTRODUCTION:

Anyone who takes an antibiotic, confident that illness will remit, is implicitly trusting in the power and validity of experiments as applied to real-world contexts. Indeed, the hard sciences, including biology, chemistry, physics, and medicine, all rely primarily on experimentation to examine and illuminate basic processes. Psychology embodies a long and distinguished history of experimentation, and behavioural economics, which involves a great deal of experimentation, has recently gained increasing prominence within the larger field of economics. But the methodology of experimentation has been slow to garner a following in political science. Experimentation might easily dovetail with methods more established in political science, such as formal modeling, to produce and cumulate useful knowledge; however, political scientists typically prefer archival work, case studies, field work, surveys, quantitative analysis, and formal modeling instead. Yet these other methods need not complete with experimentation. Indeed, the most exciting opportunity for methodological advancement using experimentation lies at the intersection of formal modeling and experimental testing: Formal models present hypotheses that are tested, refined, and explored through experimentation in a reciprocal manner. This process is widely and success-fully employed within behavioural economics. As yet, however, political science remains slow to embrace the added value offered by the methodology of experimentation.

Political scientists study matters concerning the allocation and transfer of power in decision making, the roles and systems of governance including governments and international organizations, political behaviour and public policies. They measure the success of governance and specific policies by examining many factors, including stability, justice, material, wealth, peace and public health. Some political scientists seek to advance positive (attempt to describe how things are, as opposed to how they should be) thesis by analyzing politics. Others advance normative thesis, by making specific policy recommendations.¹

Political scientists provide the frameworks from which journalists, special interest groups, politicians, and the electorate analyze issues. According to Chaturvedy, "...Political scientists may serve as advisers to specific politicians, or even run for office as politicians themselves. Political scientists can be found
working in governments, in political parties or as civil servants. They may be involved with non-governmental organizations (NGOs) or political movements. In a variety of capacities, people educated and trained in political science can add value and expertise to corporations. Private enterprises such as think tanks, research institutes, polling and public relations firms often employ political scientists. In the United States, political scientists known as “Americanists” look at a variety of data including constitutional development, elections, public opinion and public policy such as Social Security reform, foreign policy, US Congressional committees, and the US Supreme Court - to name only a few issues.

“As a discipline political science, possibly like the social sciences as a whole”, "lives on the fault line between the 'two cultures' in the academy, the science and the humanities” Thus, in some American colleges where there is no separate School or College of Arts and Science, political science may be a separate department housed as part of a division or school of Humanities or Liberal Arts. Whereas classical political philosophy is primarily defined by a concern for Hellenic and Enlightenment thought, political scientists are also marked by a great concern for “modernity” and the contemporary nation state, along with the study of classical thought, and as such share a greater deal of terminology with sociologists (e.g. structure and agency).²

3.2 SOCIAL SCIENCE RESEARCH:

(A) Social Sciences -

Science is broadly divided into natural (or physical) sciences and social sciences. Social Sciences include various disciplines dealing with human life, human behaviour, social groups and social institutions. They consist of Anthropology, Behaviour Sciences, Commerce, Demography, Economics, Education, Geography, History, Law, Linguistics, Management, Political Science, Psychology, Public Administration, Sociology, and Social Work. Though these sciences are treated as separate branches of knowledge for the purpose of study, they are interdependent studies of the different aspects of the same object, viz., man. By applying scientific method of study, the social sciences have grown and advance man’s knowledge of himself.

Social Sciences are not exact science like physical sciences, as they, unlike the latter, deal with human beings. Human nature and man’s environment are so complex
that it is more difficult to comprehend and predict human behaviour than the physical phenomena. No two persons are alike in feelings, drives or emotions. No one person is consistent from one moment to another. The behaviour of human beings is influenced by biological, psychological, socio-cultural, temporal and environmental factors. It is difficult to see the underlying uniformities in the diversity of complex human behaviour. A controlled experiment, which is since qua none of an empirical science, is generally well-nigh impossible in social sciences.³

Social science research is a systematic method of exploring, analysis and conceptualizing human life in order to extend, correct or verify knowledge of human behaviour and social life. In other words, Social Sciences research “Seeks to find explanations to unexplained social phenomena to clarify the doubtful, and correct the misconceived facts of social life.” ⁴

3.3 OBJECTIVES OF SOCIAL SCIENCE RESEARCH:

The aim of social science research, like research in physical sciences, is to discover new facts or verify and test old facts.

It tries to understand the human behaviour and its interaction with the environment and the social institutions.

It tries to find out the casual connection between human activities and natural laws governing them.

Another purpose of social science research is to develop new scientific tools, concepts and theories which would facilitate reliable and valid study of human behaviour and social life.
3.4 FUNCTIONS OR USES OF SOCIAL SCIENCE RESEARCH -

The functions of Social Science Research are varied. They are:

(A) Discovery of facts and their interpretation: Research provides answer to questions of what, where, when, how and why of man, social life and institutions. There are half-truths, pseudo-truths and superstitions. Discovery of facts and their interpretation help us to discard such distortions and thus enlighten us and contribute to our understanding of social reality. Research strengthens our desire for truth and opens up before our eyes hidden social mysteries.

(B) Diagnosis of problems and their analysis: The developing countries have innumerable problems such as poverty, unemployment, economic imbalance, economic inequality, social tension, low productivity, technological backwardness, etc. The nature and dimensions of such problems have to be diagnosed and analyzed. Social science research plays a significant role in this respect. An analysis of problems leads to an identification of appropriate remedial actions.

(C) Systematization of Knowledge: The facts discovered through research are systematized and the body of knowledge is developed. Thus research contributes to the growth of various social science and theory building.

(D) Control over Social Phenomena: Research in social science areas equip us with first-hand knowledge about the organizing and working of the society and its institutions. This knowledge gives us a greater power of control over the social phenomena.

(E) Prediction: Research aims at finding an order among social facts and their casual relations. This affords a sound basis for prediction in several cases. Although the predictions cannot be perfect because of the inherent limitations of social sciences, they will be fairly useful for better social planning and control.

(F) Development Planning: Planning for socio-economic development calls for baseline data on the various aspects of our society and economy, resources endowment,
people’s needs and aspirations, etc. Systematic Research can give us the required data base for planning and designing developmental schemes and programs. Analytical studies can illuminate critical areas of policy and testing the validity of planning assumptions. Evaluation studies point out the impact of plan, policies and programs and throw out suggestions for their proper reformulation.

(G) Social Welfare: Social research can unfold and identify the causes of social evils and problems. It can thus help in taking appropriate remedial actions. It can also give us sound guidelines for appropriate positive measures of reform and social welfare.

3.5 SCOPE OF SOCIAL SCIENCE RESEARCH:

The fields of social science research are virtually unlimited and the materials of research endless. Every group of social phenomena, every phase of human life, and every stage of past and present development are materials for the social scientists.

The areas of research in various social sciences listed in the Annexure would give an idea of the vast scope for research in social sciences.

(A) Inter-disciplinary Approach -

Social Science research calls for inter-disciplinary approach, for human life cannot be compartmentalized into psychological, social, economic or political aspects. “Man lives in a socio-economic and political world and thrives on its varied relationships. It is inconceivable that at study of bare and isolated events on any one aspects of man’s life would yield any meaningful results.” A discipline-specific study of a social problem from an angle of, say, economics or sociology or political science only cannot give a correct and total view of the problem. As Gunnar Myrdal points out, “In reality there are no economics, sociological or psychological problems, but simply problems, and they are complex.” Myrdal’s most enduring contribution of “circular cumulative causation” stressed that no social science by itself is sufficiently self-contained any social problem. It is affected cumulatively by economic, sociological, psychological, legal historical forces and factors. For example, the problem of poverty cannot be just studied as a mere economic problem or a social problem or a political issue. The approaches and theories of all these disciplines must be blended to provide a meaningful and valid approach to the problem. This interdisciplinary
(B) **Objectivity -**

**Meaning -**

Objectivity is sine of the scientific method. It means the willingness and ability to examine evidence dispassionately. It is the first condition of research. Objectivity means basing conclusion on facts without any bias and value judgment. The conclusion should be independent of one’s personal beliefs, likes, dislikes and hopes. Both the data and the interference drawn from their analysis must be free from bias and prejudices.

Research, as stressed by Myrdal, has an inbuilt, self-cleaning, or self-healing capacity. Facts kick, and do so even-though with some delay when data are first assembled under categories that correspond to the biased approach applied but are inadequate to reality.

(C) **Factor affecting objectivity-**

It is very difficult to achieve objectivity in social science research. This difficulty arises out of the adverse influences of (1) personal prejudices and bias, (2) value judgment, (3) ethical dilemma and (4) complexity of social phenomena.

Personal prejudices and biases emanate from habits of thought, temperamental weaknesses, skeptical attitude, wishful thinking, vested interest etc. “Prejudice and biases are like fantasies – to believe what is comforting to believe.” These make on to believe something without considering evidence.⁶

Value related problems arise from the social context within which research occurs. A Researcher’s attitudes towards socio economic issues are influenced by these values. His judgment is clouded by the ‘ism’ Capitalism or communism or socialism, etc., to which he belongs and the writer/ philosopher who inspired him. Even great social scientists project their values and views in their theories. The proletarian interpretation of Karl Marx, Bertrand Russell’s power interpretation of social order, Freud’s sex interpretation of society, Fabian socialism of George Bernard Shaw and Gandhiji’s philosophy of limiting wants and trusteeship are illustrations. To quote Gunnar Myrdal, “value premises are needed even in
the theoretical stage of establishing knowledge about facts and factual relations. A view is impossible except from a viewpoint. A disinterested social science has never existed and can never come to exist— for logical reasons; valuations are always implied in our search for truth.”

Personal Preconceptions may not only have a distorting effect on the data but are also highly insidious, because they are so “subtle, so implicit, so deeply noted that it is difficult for us to discern them in ourselves, or when they are called to our attention, to avoid rationalizing them, instead of examining them objectively.”

Ethical dilemmas arise out of the researcher’s relations with other participants in the research process. There are four types of interpersonal relations that pose potential ethical dilemmas: (i) relations with those sponsoring the research, (2) relations with those permitting access to sources of data, (3) relations with the investigators connected with the project, and (4) relations with research subjects themselves.

Social Phenomena are seldom simple. They are too complex for comprehension, and too vast to provide precise verifiable knowledge. A physical scientist is confined to the four walls of a laboratory, and he can conduct controlled experimentation. On the other hand, the laboratory of social scientists is as vats as the entire society and it are not amenable for controller’s experimentation.

Although strict objectivity is next to impossibility, it is possible for a reflective researcher of social life to attain a reasonable level of objectivity consistent with logical and systematic thinking.

(D) Achieving reasonable objectivity in social science research -

The following approaches and measures may contribute to some degree of objectivity.

1. Patience and self-control: A researcher must have utmost patience and self-control. He should not be overwhelmed by personal likes and undisciplined imagination and wishful thinking. He must discipline himself to avoid prejudging the phenomenon under study.

2. Open mind: A researcher is apt to have a habit of thinking and personal notions that leads him to presuppose that certain facts are “truths.” He must have an open mind
to subject his research process and interpretations to the critical review of other scientists. Only by such interaction, can corrections be made.

3. Use of standardized concepts: The concepts should be precisely defined and used consistently so as to avoid misconceptions and confusion.

4. Use of quantitative method: Appropriate statistical and mathematical techniques of analysis may be used, as they are free from subjective bias.

5. Co-operative research: Group research will be more objective than an individual research. Group interaction will reduce the influence of personal biases.

6. Use of random sampling: In drawing a sample of units of study, random sampling technique may be used, as it is free from personal prejudices.⁹

3.6 LIMITATIONS OF SOCIAL SCIENCE RESEARCH -

Research in social sciences has certain limitations and problems when compared with research in physical sciences. They are discussed below:

(A) Scientist – a part of what he studied –

It is a fact that a social scientist is part of the human society which he studies given rise to certain limitations.

Man must have to be his own guinea-pig, as pointed out by Julian Huxley. This has a number of methodological consequence. For example, it restricts the scope for controlled experiments. It limits the scope for objectivity in social science research, as explained earlier.¹⁰

(B) Complexity of the subject matter -

The subject matter of research in social sciences, viz. human society and human behaviour is too complex, varied and changing to yield to the scientific categorization, measurement, analysis and prediction. The multiplicity and complexity of causation make it difficult to apply the natural science technique of experimentation.
Human behaviour can be studied only by other human beings, and this always distorts fundamentally the facts being studied so that there can be no objective procedure of achieving the truth.\textsuperscript{11}

(C) Human Problems -

A social scientist faces certain human problems which the natural scientist is spared. These problems are varied and include refusal of respondents, improper understanding of questions by them, their loss of memory, their reluctance to furnish certain information, etc. All these problems cause biases and invalidate the research findings and conclusions.\textsuperscript{12}

(D) Personal Values -

Subjects and clients, as well as investigators, have personal values which are apt to become involved in the research process. One should not assume that these are freely exploitable. The investigator must have respect for the client’s values.\textsuperscript{13}

(E) Anthropomorphization -

Another hazard of social science research is the danger of the “the temptation to anthropomorphize about humans.”\textsuperscript{12} It results in using observations obtained by sheer intuition or empathy in conceptualizing in anthropomorphic manner.\textsuperscript{14}

(F) Wrong decision -

The quality of research findings depends upon the soundness of decisions made by the social scientist on such crucial stages of his research process as definition of the unit of the study, operationalization of concepts, selection of sampling techniques and statistical techniques, Any mistake in any of these decisions will vitiate the validity of his findings.\textsuperscript{15}

3.7 ETHICS IN SOCIAL SCIENCE RESEARCH:
Research in social science often involves use of unethical, practices. Issues of ethics arise primarily out of researcher’s relations with (a) sponsor of research, (b) those who permit access to sources of data, and (c) research participants / respondents.

(A) Ethical issues of research sponsorship - 

Research may be funded by either research promotional bodies like research foundations, Indian Council of Social Science Research and similar Councils and University Grants Commissions of research –user like Planning Commission, Government Departments and business undertaking and financial institutions. In the former case, the funding takes the form of research grant and initiative is taken by the researcher himself. He forwards his research proposal to the promotional body for research grant. The granting agency does not prohibit the publication of the results for consumption by the scientific community.

A contracted research undertaken for a sponsoring user organization specifies the nature of the work to be done, the time period for its completion and the conditions relating to the use of results. Given the highly structured and restricted nature of contract research and the explicitly stated intention of the sponsor, the primary ethical questions posed are: whether the researcher wants to operate within the confines of such restrictions and whether he is willing to accept the restrictions regarding the publication of the research findings. The researcher must decide these issues before accepting the assignment. 16

(B) Approval of access to data -

A social science research may require collection of data from the documents and records of an institution or from its employees. The permission from the head of the institution has to be sought. The ethical issues that arise in this context are:

- Should the nature of the research project and its objectives be indicated to the permission granting authority?
- What should be the degree of anonymity to be accorded to the institution concerned?
● Should the procedure for handling data in ways assuring the degree of anonymity be stated?

● Should the findings of the study be made available to the institution concerned? If so, in what form they should be made available?

There are no hard and fast rules for deciding these questions. They have to be settled mutually by the researcher and the head of the institution concerned.17

(C) Ethical issues relating to the Respondent / subjects -

Of all the ethical issues, the issues concerned with the respondents are far more important. The respondents constitute the research subjects. They are individual’s form whom data are obtained. The major categories of ethical issues relating to the research subjects are:

1. Sometimes people are made to participate in a research project without their knowledge or consent. For example, in social-anthropological studies of rural or tribal communities, the researcher may conduct his research without the knowledge of the people concerned, fearing that their awareness of the research may affect the naturalness of their response or behaviour. The researcher who involves the research subjects in research thus infringes upon their right to make their own decision to participate or not to participate.18

   Ideally speaking, the research subject’s consent should be obtained after giving them enough information about the proposed research. But often, the consent may be wholly or partially forced. For instance, the employer may direct his employees to ‘cooperate’ with a research project, or strong incentives may be offered to tempt the participants to give consent. Such coercions restrict the research subjects’ freedom to decide whether or not to participate in a research.

2. In some research, the consent of respondents is obtained without informing them of the purpose of the research. Such concealment naturally curtails the free choice of the respondents.

3. In some researches, the researcher may find it necessary to give incorrect information about the proposed research to potential subjects in order to manipulate their perceptions and behaviour. Such deceptions are regarded as questionable practices.
4. In studies relating to human values, the social scientist may create opportunities for research subjects to lie, steal or cheat. Is it appropriate to expose research subjects to such normal hazards? Opinions differ.

5. Another questionable/non-ethical practice is to expose participants to physical or mental stress with a view to studying their reactions. For example, in a mock-hijacking of an aircraft or a mock-panic situation in crowd without a four-warning, people are subject to physical or mental stress.

6. A behavioural scientist may dig out information from respondents on private or personal matters such as marital life of religious faith or personal opinions by employing techniques of participants observations, in-depth interviews or disguised projective test. Such practices amount to invasion of privacy.

7. Finally, there is the ethical issue relating to the obligation of maintaining the anonymity of the research respondents and keeping research data in confidence. Anonymity might be violated through reports and publications. Despite the practice of using pseudonyms, the identity of the community or institution becomes know indirectly.

   Although a respondent’s name remain anonymous, his data contribute to the average / percentages reported for the group to which he belongs. Should the respondents be told beforehand of the uses to which their data will be put?

(D) Ethical dilemmas or Benefits of Research -

The above categories of ethical difficulties arise in social science research. The crucial question that arises is: “Should a social scientist adopt some unethical practices out of necessity or abandon his proposed research? It is not easy to decide this question. One of the alternatives ethics or research – has to be sacrificed. However, in the larger interest of developing useful knowledge, it is desirable to strike a balance between the mortal cost of unethical practices and the potential benefits of research. No doubt that researchers have an obligations to the research subjects. But they have a greater social responsibility to find facts relevant to the solution of pressing human problems and thus to promote social welfare. An evaluation of such potential benefits of research and the moral cost of unethical practices will provide the clue to the choice. When the benefits far exceed the moral cost, it is desirable to go ahead with the research; even it calls for some unethical
practice like concealing facts, invasion of privacy of respondents, etc. However, participants should not be exposed to physical or mental stress.

3.8 THE PROCESS OF SCIENTIFIC RESEARCH -

Research process consist series of steps necessary to effectively carry out the research.

Research process involves a number of interrelated activities that overlap continuously rather than follow a particular sequence. The operation involved in the research processes are so interdependent that the earliest steps or operations determine to an applicable extent the nature of latter ones. If subsequent procedure have not been taken into account in the earliest stages, serious difficulties may arise which may even prevent the completion of the study. The various steps involved in a research process are not mutually exclusive, nor they are separate and distinct. They do not necessary follow each other in any specific order and researcher has to be constantly anticipating at each step in the research processes the requirements of subsequent steps.  

The major steps in research process includes a set of interrelated operations which are as

1) To decide the general area of a subject matter.
2) To formulate specific problem & statement of problem.
3) Review of literature
4) Formulation of hypothesis.
5) Preparing Research design.
6) Determining sample design.
7) Data Collection
8) Analysis of data.
9) Testing the Hypothesis.
10) Generalization and interpretation of data.

1) To decide the general area of subject matter:-

The researcher has to decide the general area of aspect of a subject matter that he/she would like to enquire. This decision points out to a general area of subject of own interest of the researcher. Such topic may be suggested to the researcher by some scientific or intellectual interest researcher guide or by some institution which has practical problem as it is in need of solution. It does not help much in planning and organization of research because the spastic details are lacking.

2) Formulation of Research problem & statement of problem:-

The decision regard to the general area of interest hardly puts the researcher in position to start considering the procedure for data collection and analysis of data, since at this stage he/she does not know precisely what specific questions within his general area of interest. Thus the researcher need to formulate a specific problem before he/she can take steps. Without a problem the heaps of data would hardly mean anything. 21

At first instance it would seems easy to see and pose a problem for study, but experience of researcher proved that "It is often more difficult to find and to formulate a problem than to solve it". The researcher has to put a great deal of thought into formulation of a problem if he/she expects to get anything worthwhile out of efforts to solve it. This task of formulating a research problem is a step of great importance in entire research processes. The problem to be investigated must be defined unambiguously for, that will help determining relevant data from irrelevant ones. Care must be taken to verify the objectivity and validity of the background facts concerning the problem. Prof. W.A. Neiswanger correctly state that the statement of objective is of basic importance because it determines the data which are to be collected. The characteristic of data which are relevant, relation which are to be explored, the choice of techniques to be used in there explorations, and form of final report. 22

The formulation of research problems involves following two steps.
1. Understanding the problem thoroughly.

2. Rephrasing the same into meaningful terms from analytical point of view.

For formulating a Research problem the researcher may adopt any one or some of all of the steps as,

1) A careful study of relevant literature.

2) A systematic study of the subject matter.

3) Discussion with one's own colleagues or some expert in the matter.

4) Taking guidance from ‘Guide’.

5) Discussion with Govt. Officials, private business mans and Managers, trade Union leaders, who are directly concerned with the problem or who are knowing about the problem.

6) Framing statement of problem.

A necessary step in the initial stages of problem formulation in to reduce research task to manageable size.

3) Review of Literature:-

Once the problem is formulated, a brief summary of it should be written down. At this juncture the researcher should undertake extensive literature survey connected with problem. For this purpose, abstracting and indexing journals, published and unpublished bibliographies academic journals, conference proceedings Govt. reports, books etc. Must be tapped deepening upon nature of the Research problem. In this processes it should be remembered that one source will lead to another. The earlier, if any which are similar to the study in hand should be carefully studied. A good library will be a great help to the researcher at this stage.23

4) Formulation of Hypothesis:-

The suggested explanation or solution to the research problem is called as 'Hypothesis'. This tentative explanation may be the solution to the
problem. The enquiry is directed towards finding out whether they really constitute the solutions.

Research may begin with clearly formulated hypothesis of it may end up by formulating hypothesis. The first kind of research is known as 'hypothesis testing' researches and the second as 'exploratory' or 'formulative' studies.  

The development of working hypothesis plays an important role. The role of hypothesis is to guide the researcher by delaminating the area of research and keep him in right part. It sharpens his thinking and focuses his attention on more important facts of the problem. It also indicates the type and quality of data required and type of methods of data analysis to be used. As such the manner in which research hypothesis are developed is particularly important since they provide the focal point for researcher.

The working hypothesis may be developed by using following approaches.

1) Discussion with colleagues and experts about the problem, its origin and objectives in seeking solutions.

2) Examination of data and records.

3) Review of similar studies in area of research problem.

4) Exploratory personal investigation.

5) Preparing Research Design:-

The research problem having been formulated in clear cut terms to indicate the types of information needed to answer it, the researcher turns to task of working out a 'Research Design'.

"A research design is a plan comprising the researcher’s decisions about the procedures and sampling. Collection and analysis of data for a given data study aims to fulfill the purpose of the study without a waste of time, energy and money."
Designing the research ensure against its failure. It is economical in the long run, because it avoids the possibility of fruitless enquires.

The research design differs according to research purposes as:-

1) Exploration.

2) Description

3) Diagnosis.

4) Experimentation.

Research design requirements vary for different types of studies. For example the studies whose purpose is exploration requires a flexible research design, whereas those aiming at description, diagnosis requires a more rigid design.

Through designing the research, the investigator ensures that he will most probably achieve his research objectives with reasonable time money, energy.

6) Determining sample size:-

All the items under considerations in the field inquiry constitute a universe or population. A complete enumeration of all the items in population is known as census enquiry. It can be presumed that in such an enquiry when all the items are covered no element of chance is left and highest accuracy is obtained. But in practice this may not be true. Even the slightest element of bias in such an enquiry will get larger adverse results. Besides, this type of inquiry involves a great deal of time, energy and money. This census enquiry is not possible in many cases. Hence quite often researcher selects only few items from the universe for his study purpose. The item so selected constitute what is technically called as sample.26

The researcher must decide the way of selecting a sample or what is popularly known as the sample design. In other words a sample design is definite plan determined before any data are actually collected for obtaining a sample from given population. The researcher is expected to draw a sample from the universe in such a manner that the findings based on it will
correspond closely to those that would have been obtained, if the universe been studied.

Sample can be either probability samples or non-probability samples. With probability samples each element has a known probability of being included in the sample but the non-probability samples do not allow the researcher to determine random sampling, systematic sampling, stratified sampling, cluster or area sampling where as non-probability sampling or those based on convenience sampling, judgment sampling and quota sampling techniques.

Out of above different methods of sampling any one method can be adopted by researcher. In practice, several of the methods of sampling described may well be used in the same study in which case it can be called as mixed sampling. The sample design to be used must be decided by the researcher taking into consideration the nature of inquiry, time and money available.\textsuperscript{27}

7) Data Collection -

The plan of research including sample design thus compel the researcher turns to the implementation of part of it. The next step is to collect data that are appropriate.

The data can be grouped in two categories.

1) Primary data

2) Secondary data.

The primary data may be collected by personal interview observation, questionnaire, schedules etc. The Secondary data may be available from Govt. Dept., Magazines, Annuals Reports & Chambers of Commerce, Word organizations etc.

The researcher may utilize primary or secondary data for his research may adopt any method of its collections.

The type and form of data utilized for research problem is depend on following consideration.
1) Nature of Inquiry.

2) Objective of Categories Inquiry.

3) Resources Available with Researcher

4) Nature and Type of Respondents.

The researcher should select one of these methods of collecting data while taking into consideration the nature of research problem, objective and scope of research problem, financial resources available time and desired degree of accuracy. Though he should pay attention to all these factors but much depend upon the ability and experience of researcher. In this context Dr. A.L. Bowley very aptly remarks that "In collection of statistical data commonsense is chief requirement and experience is the chief teacher".

8) Analysis of Data -

After data has been collected, the researcher turns to the task of analyzing it. The analysis of data requires a number of closely related operations such as establishment of categories, the application of these categories to raw data through coding, classification & tabulation and then drawing statistical inferences. Analysis of data includes tasks like,

1) Editing of data.

2) Coding of the data

3) Classification of the data.

4) Tabulation of the data.

5) Drawing statistical inference by use of statistical techniques such as averages, dispersion, skew ness, co-relation, association of attribute and various test of significance.

9) Hypothesis Testing -

After analyzing the data as stated above, the researcher is in a position to test the hypothesis, if any, he had formulated earlier. Here retention or
discard of hypothesis will take place. In case the hypothesis fits the findings, the theory from which the hypothesis deduced would be proved, if the hypothesis disproved the below of disprove will pass on to theory which originated the hypothesis. In some cases the blow is not so severe and hence theory may survive with modification warranted by research findings. If the researcher had no hypothesis to start with, the generalization established on the basis of data may be stated as hypothesis.30

10) Generalization and Interpretation of Data -

If a hypothesis is tested and upheld several times, it may be possible for the researcher to arrive at generalization i.e. to build theory.

If researcher had no hypothesis to start with, he might seek to explain his findings on the basis of some theory. It is known as interpretation. The processes of interpretation may quite often raise new questions which in turn may lead to further research.31

11) Report Writing -

The last but not least stage of research process is to prepare the report which generally known as 'Thesis' the research work is not complete till such report is not published.32

Reporting the research, to be sure, requires an order of skills somewhat different from those needed in earlier stages of research, since the purpose of a report is communication with audience. It is expected that research report would enlighten the readers on the following points.

1) The problem of research
2) The research procedure.
3) The result of findings.
4) The theoretical and practical implications of findings.

Writing of report must be done with great care keeping in view the following –
1) The layout of report

2) Report should be written in concise and objective style in simple language while avoiding vague expression.

3) Charts and illustration in the main report should be used only if they present the information more clearly and forcibly.

4) Calculated confidence limits, various constrains in conducting research operation must be mention.

Moreover the process of research can be explained as formed normally used in thesis or report writing.

A. The Preliminary.

B. The Main Body.

C. The Conclusion and Reference Material.

A. The Preliminary contains information about the following.

1) Statement of the problem.

2) Objective and purpose of study.

3) Review of Literature.

4) Justification for present study.

5) Scope of the study.

6) Conceptual Framework

7) Methodology Adopted

8) Limitation of the study.

A – The Preliminary -
1) Statement of the Problem - Research must carry a statement of the nature and importance of the problem with specific question to be answered or hypothesis of tested. The key questions and the locating problem should be specified.

2) Objective and Purpose of Study - A research is carried out due to its need. Hence the researcher must mention the purpose of conducting research.

3) Review of Literature: It is necessary to present a brief review of relevant past work. A brief summary indicating nature and scope of variation of the present study with research work already conducted should be prepared.

4) Justification for Present Study: The researcher has to justify his observation with critical approach. Stress should be given to his major investigation. Also he should verify usefulness of the present observation with his previous findings. Various fields to be covered should be made clear for his study which justifies his final outcome.

5) Scope of Study: The research must indicate the scope of the study pointing out exact coverage, how it is going to be better than other studies available on the subject.

6) Conceptual Framework: Definition or special meaning of all important terms should be clearly mentioned to enable reader to understand concepts underlying the investigation.

7) Methodology: (i) Formulation of Hypothesis: A hypothesis should be logical, simple, quantifiable and variable.

(ii) Selection of Samples: Selecting sample depends on definition, size of representativeness of sample.

8) Limitation of Study: In relation of constraints of time, money, energy as well as availability of data, respondent etc.

1) Main body should contain the following.

2) Data Collection

3) Analysis of Data

4) Tabulation and Interpretation of Results.

5) Verification of Results.
1) Data Collection: Data is collected through questionnaires, interview schedules, projective techniques, attitude scale, etc.

2) Analysis of Data: The collected data should be systematically analyzed.

3) Tabulation and Interpretation of Results: Analyzed data tabulated properly helps the reader, in interpreting data in relation to previous findings, generalization of finding any additional facts.

4) Verification of Results: The interpreted data should be verified by employing method of data collection in various sample groups.

(B) Conclusion -

After verification conclusions can be drawn. The researcher should always give his suggestion for further research.

At the end of report, Bibliography listing books referred, appendices of tables etc. used and indexing of important terms used should be given thus conclusion and reference material should provide suggestions for further study, bibliography and appendices.  

3.9 Research in Politics:

(A) The Main Concept of Politics -

Government -

A government is the body that has the authority to make and power to enforce laws, rules, and politics. Governments exist in all institutions that have laws, rules, or politics.

The illustrious philosopher Plato classified governments into monarchies (the rule of one individual), oligarchies (rule by a small elite), democracies (rule by the governed). Modern taxonomy separates monarchies (where succession is hereditary) from autocracies.

In more recent times, the distinction between forms of government has become complex; in a constitutional monarchy, for instance. There is a monarch as head of
state, but actual power is typically held by a parliament or legislative assembly of some description. A republic is the term usually used to describe nations without a monarchy.

Likewise, the definition of “democracy” has become less clear in more recent times; many nations with widely differing forms of government describe themselves as democratic. The North Korean constitution, for instance, describes North Korea as a democratic state, but some commentators in Western Nations have described it as a totalitarian dictatorship.

Autocracy is a form of government in which unlimited or near-unlimited power is held by an individual or group, without effective constitutional limitations, who derive their power from force, rather than legitimacy. The term is frequently viewed as pejorative, and many nations described as “dictatorships” have disputed this claim.35

Government is often classified according to the number of people who hold political power.

(B)   Forms of Government -

- In autocracies one individual holds all the power. This category includes absolute monarchies, as well as dictatorships.

- In oligarchies political power is held by a small group of people who share the same interests.

- Democracies are governments where the peoples as a whole, hold the power. It may be exercised by them (direct democracy), or through representative chosen by them (representative democracy).

- Anarchy is a lack of government or imposed rule.

The boundaries between the above forms of government are not absolute. For example, during the 19th century, many proclaimed “democracies” restricted voting rights to a minority of the population (e.g. property-owning males). This could qualify them as oligarchies, rather than as democracies. On the other hand, the non-voting minority was often quite large (20-30% of the population) and its members did not form a voting group with common interests. This is seen as the hallmark of most oligarchies. Thus, this form of government occupied a space between democracy and oligarchy as they are understood today.36
(C) **Origin of Government** -

There are a wide range of theories about the reasons for establishing governments. The four major ones are briefly described below. Not that they do not always fully oppose each other – it is possible for a person to subscribe to a combination of ideas from two or more these theories.37

(D) **Free Theory** -

Many political philosophies that are opposed to the existence of a government (such as anarchism, nihilism and to a lesser extent Marxism, as well as others), emphasize the historical roots of governments – the fact that governments along with private property, originated from the authority of warlords and despots who took, by force land as their own (and began exercising authority over the people living on that land). Thus, it is sometimes argued that governments exist to enforce the will of the strong and oppress the weak, maintaining and protecting the privilege of a ruling class. It states that the government emerged when all the people of an area were brought under the authority of one person or group.

(E) **Order and Tradition** -

The various forms of conservatism, by contrast, generally see the government as a positive force that brings order out of chaos, establishes laws to end the "War of all against all", encourages moral virtue, while punishing vice, and respects tradition. Sometimes, in this view, the government is seen as something ordained by a higher power, as in the divine right of kings, which human beings have a duty to obey.

(F) **Natural Right** -

Natural rights are the basis for the theory of government shared by most branches of liberalism (including libertarianism). In this view, human beings are born with
certain natural rights, and governments are established strictly for the purpose of protecting those rights. What the natural rights actually are is a matter of dispute among liberals; indeed, each branch of liberalism, and these rights are sometimes mutually exclusive with the rights supported by other liberals. As result, there is some debate between natural rights theorists, ranging from modern writers such as Tibor Machan to Enlightenment thinkers such as Locke, Kant, or Jefferson.

(G) Social Contract -

One of the most influential theories of government in the past two hundred years has been the social contract, on which modern democracy and most forms of socialism are founded. Contemporary liberalism such as in the United States also tends to work under a social contract theory. The social contract theory holds that governments are created by the people in order to provide for collective needs (such as safety from crime, poverty, illiteracy) that cannot be properly satisfied using purely individual means. Governments thus exist for the purpose of serving the needs and wishes of the peoples, and their relationship with the people is clearly stipulated in a "Social Contract" (a constitution and a set of laws) which both the government and the people must abide by. If a majority is unhappy, it may change the social contract. If a minority is unhappy, it may persuade the majority to change the contract.

This theory is based on the idea that all men live in a state of nature which is not ideal to perfect harmony. It is also an agreement among the members of an organized society or between the governed and the government defining and limiting the rights and duties of each. Thomas Hobbes, John Locke, and Jean-Jacques Rousseau are three of the most famous philosophers of contractarianism. Today, natural rights are the basis for many issues involving the scope of governmental powers.38
H) Governmental Operations -

Governments concern themselves with regulation and administering many areas of human activity, such as trade, education, or medicine. Governments also employ different methods to maintain the established order, such as secrecy, censorship, police and military forces (particularly under despotism, see also police state), making agreements with other states, and maintaining support within the state. Typical methods of maintaining support and legitimacy include providing the infrastructure for administration, justice, transport, communication, social welfare, etc.; claiming support from deities; proving benefits to elites; providing shops for important posts within the state; limiting the power of the state through laws and constitutions; and appealing to nationalism. The modern standard unit of territory is a country. In addition to the meaning used above, the word state can refer either to a government or to its territory. Within a territory, subnational entities may have local governments which do not have the full power of a national government. Different political ideologies hold different ideas on what the government should or should not do. One political spectrum related to the role of government is that of personal freedom, from authoritarianism to liberalism to libertarianism. Economic policy can range from a command economy to laissez-faire, with most countries using some form of mixed economy with various degrees of government involvements.39

(I) History of Governments -

Governments arose with the increasing complexity of human society during the history of recorded civilization – promulgation of the Code of Hammurabi and Athenian democracy, along with Roman Republic and Empire, and the formation of state in medieval Europe, are signal events from which understanding of government and politics arose. The early modern era in the West saw the rise of monarchy, revolutions, democracy, and nationalism. Ideologies such as fascism and later Communism during the Cold War in the 20th century influenced government operations. For other parts of the world, particularly the Middle East and Africa, tribal and clan-based governments interacted with religious and colonial forces.40

(J) The Nature of Maharashtra Politics -

The nature of Maharashtra politics has been changing since the late 1930s. In the first three decades of the present century, politics in Maharashtra and the Congress were
the preserve of the educated urban middle class—mainly the Brahmins, who dominated the Maharashtra Pradesh Congress Committee (MPCC). When the Maratha elites realized that joining the Indian National Congress was in their interests, they entered it in masse by the thirties, owing to the untiring efforts of Keshavrao Jedhe and N.V. Gadgil. With the widening of the franchise in 1935, the Maratha community gained some representation in the state legislature. The 1942 Quit India movement attracted a number of Maratha youths from rural Maharashtra, who had courage and a sense of adventure. These youths took up arms against the British. Y.B. Chavan, Vasantdada Patil, Kisan Veer, Nana Patil, and many others were leading participants in the movement. The 1942 movement mobilized the rural masses, who were inspired by an intense carving for freedom.\footnote{41}

However, as sea-change came about with Independence and adult franchise. As stated in Chapter III, the Maratha caste-cluster forms 40 per cent of population. With the multiplier effect of elections, and because the non-Maratha groups, which form 60 percent of the population, are dispersed, fragmented and unorganized, more than 70 percent of the elective seats, from the Gram Panchayats to the state legislature, go to the Maratha caste-group.\footnote{42}

There has been a considerable amount of study and research done on Maharashtra politics in order to understand its nature. What is the role of the sugar-lobby in the region’s politics? What is the significance of caste in politics? How far does the big bourgeoisie of Bombay influence political leaders and Governmental Policy? Has the Shivaji myth become a Shivaji cult? What are the reasons for political stability for four decades after Independence? Why has Maharashtra entered the era of short-lived governments in recent years? How far have the scheduled castes and tribes been given their share in power? Why have non-Congress parties failed to make a headway in the region? These are some of the questions which have occupied the minds of scholars, both Indian and foreign.\footnote{43}

Let us first examine the more significant factors which shape the nature of Maharashtra politics. These can be listed as follows: caste, money, the hegemonic rule of single party, a weak and fragmented opposition, an enlightened and vigorous press with a rich tradition of political criticism, and a politically conscious people. There may be other factors, but these appear to be more significant.

The research design of the present study is based on diagnostic case study for diagnostic critical analysis. The contribution of Mr. Pachpute in various sectors is evaluated through scientific methodology. The investigation is based on the collection of primary data through questionnaire and personal interviews and secondary data through
various articles and reports. The latest computer technology is used for data analysis and
testing of hypotheses for precise and accurate conclusions.

1) Analytical and explanatory method
2) Descriptive Research Methodology
3) Diagnostic Research Methodology
4) Experimental and Investigatory Scientific Methodology.

3.10 SOURCE OF DATA:

In order to make this diagnostic study reliable, suitable, comprehensive and
useful a good deal of information and data has been collected through various sources. The
present investigation or research work is based on two types of data.

i) Primary data

ii) Secondary data

i) Primary Data:-

This data is collected with the help of accurate and comprehensive
questionnaires and through personal interviews.

ii) Secondary Data:

Essential data for diagnostics will be collected through various books of
eminent scholars, research articles from research journals, gazetteers, articles from various
periodicals, reports, articles from newspapers, related to the present research.

A) Source of Information and Data -

I) Chavan’s Leadership in Political, Social and Educational fields”

II) Mr. Kamat G.S. to “Co-operative Principles and Practical Management”
B) Significance and scope of the study -

Many scholars have explained the importance of Political Science for human welfare various States have accepted the concept of ‘Welfare State’. British scholar J.W. Gurner suggests that Political Science deals with study of States. Robert S.M. in his famous volume viz “Modern Political Analysis” explains significance of Political Science as the study of Political States and Systems.

Modern age is the age of scientific investigation and research. It is the age of explosion of knowledge and information. Each and every science in enriched by the innovative concepts and qualify research, may be theoretical or applied. Theoretical research helps for the development of Theories and model building. Applied research is highly significant and useful for resolution of many problems. Research in Political Science also plays vital role in human welfare. Intellectual leadership can change the political scenario positively, for human welfare, through socio-economic, political and cultural transformation in multidimensional ways.

(C) Source of information and data -

Research work of


II) Mr. Rajdev T.B. (2001)

Contribution of Dr. Datta Deshmukh in the development of Maharashtra


“Political Leadership Mr. Bhausaheb Hiray”
3.11 HYPOTHESES AND METHODOLOGY:

Hypotheses:

For the critical analysis of the present research work following hypotheses were formulated.

1. The development of leadership of Mr. Pachpute created a role model as an icon inspiration for next generation.

2. His leadership developed through a lot of struggle and conflict.

3. He played a vital role in the development of Ahmednagar District through his dynamic leadership.

4. As the minister of various portfolios and party regional president he influenced the development of various sectors in Maharashtra through his significant contribution.

5. His contribution in co-operative sector proved beneficial for Socio-economic transformation.

6. He provided opportunities for rural development through education.

7. He played key-role for social integration and harmony through his contribution in religious and cultural fields.

3.12 DATA ANALYSIS AND TESTING OF HYPOTHESES:

The questionnaires crammed by the respondents were collected. The info was altered for any inconsistency or, incomplete responses. Successive stage was codification of knowledge. All the variables were known and written by distribution distinctive numerical worth, to every variable. Knowledge was then given in tabular graphical format wherever ever acceptable. Knowledge was then analyzed victimization apt quantitative applied math tools. To validate the hypothesis, non-constant take a look at Spearmen’s rank co-relation constant was applied.

Data analysis was carried out victimization applied math Package for Social Sciences (SPSS) for Windows version thirteen.