3.1. Introduction:

A research design is a plan of action. It is a plan for collecting and analyzing, data in an economic, efficient and relevant manner. According to Bernad Philips, research design is a “blue print for the collection, measurement and analysis of data”. A design is used to structure the research, and to show how all the major parts of the research project (samples or groups, measures, treatments or programs, and methods of assignment) will work together to address the central research questions. Educational research refers to variety of procedure and strategies in which researchers makes an efforts to understand different aspects of education, mainly including student learning, teaching methods, teachers training, classroom dynamics, policies etc. Researchers are of the opinion that educational research shall be conducted strategically in rigorous and systematic way. The present specificity of methodology to be adopted is must for the researcher as it controls and regulates his work since the present selected problem is of high importance and firms the major portion in the education system. To study and resolve it a type of methodology is adopted and same is stated in the preceding pages. The problems unfold themselves and show their distinguished nature. The problems need to be studied with a particular type of methodology. A methodology chosen unfolds the problems but
provides valuable information regarding the type of tool to be used and whole procedure of the research.

3.2. Type of the Study:

The present research focuses on the problems of primary school dropouts, and demands the field based data collection analysis. Survey method is employed to identify the extent and nature of school dropout, condition of existing infrastructure facilities in primary schools, situation related to school attendance and non attendance, learning levels of students in the primary schools of Gulbarga District.

Keeping in mind the requirements of the study a survey is designed to reconnoiter several aspects of the situation of primary schooling with special reference to the above mentioned issues.

Survey research represents one of the common types of quantitative approach in social sciences including educational research. In present study, the researcher aims to collect the information from different groups of peoples such as: school teachers, SDMC members, parents and dropout children. Children and parents are from rural background and will give information through discussion on oral enquiry. The researcher experienced that majority of the teacher avoid writing the issues in black and white paper and they prefer to talk. Information from the school is observable and perceivable through records and in the view of these characteristics to groups of tools depending upon the nature of data providing personnel.
Interview schedule was designed for data collection from teachers, SDMC members, parents and dropout children. Observation schedule was proposed as tool for collecting data related to the school facilities, enrollment and retention, and general physical condition of school. Teacher made achievement test was planned for collecting the achievement related information.

A systematic procedure for preparing the tools was designed and executed. The entire data obtained through observation schedule, interview schedules, and achievement test was processed and compiled and presented with regard to the five major objectives of the study. The data was both qualitative and quantitative. The quantitative data available was digitized and processed to the excel sheets. Further it is processed for percentage analysis. The qualitative data was critically analyzed for uniformities, peculiarities and contradictions. SPSS 20 software was employed for statistical analysis of data.

An attempt will be made in the present study to analyze and understand the present scenario of different issues related to dropout problems. Based on these qualitative and quantitative aspects, suggestion and recommendations would be made to bring back the dropout children in to mainstream.

3.3. Objectives of the Study and Data Sources:

The objectives of the study are evolved and presented in the Chapter 1. The same objectives are listed in the column one of the following table.
The table provides the rubrics of the objectives, tools and source of the data to be collected.

**Table – 3.1: Sources of information and tools used for different objectives**

<table>
<thead>
<tr>
<th>Objectives in brief</th>
<th>Tools (interview schedules)</th>
<th>School observation schedule</th>
<th>Official records</th>
<th>Students achievement test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parents</td>
<td>SDMC</td>
<td>Teachers</td>
<td>Children</td>
</tr>
<tr>
<td>1. To study the school dropout and deemed dropouts in terms of school records, school observation and house visit.</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>√</td>
</tr>
<tr>
<td>2. To identify the nature and distribution of dropout children on various attributes.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>3. To identify the SSA facilities and infrastructure deficiencies in the primary schools of Gulbarga district and its relation to deemed dropout and dropout.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>4. To identify the major issues and related factors influence the dropout rate as perceived by educational active participants.</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>5. To study the levels of learning achievement in mathematics and Kannada language.</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
SOURCES OF DATA:

PRIMARY SOURCES:

The primary data was collected from different data providing personnel of different blocks of Gulbarga district. Official permission was taken from the Department of Education, Gulbarga University, Gulbarga the collection of data started. The researcher took the permission of head teacher of the sample school and collect the information from the school teachers, SDMC members and observed all the class rooms of the schools. Achievement test was administered on class 5th students. The information from the households of near vicinity of 500 mt. around the school was collected, and also collected information from the dropout children.

SECONDARY SOURCES:

The process of gathering reliable and meaningful information is the cardinal aspect of the enquiry and forms a central link in the plan of the entire research design. The principle sources of information for the present study are various research articles, review articles, published books, articles from planning and administration, large scale surveys such as national sample survey (NSS), NFHS data I, II, III, census 2011, the national council for applied economic research (NCAER), different reports such as world bank report, MHRD report, NEUPA report, PROBE report, CREATE report etc. The information was collected from DDPI office of Gulbarga district and SSA department to collect information about the remedial measures towards the Dropout problem. The information also collected from various websites.
The secondary source of information was collected by visiting the libraries of following institutions, and universities.

1. Gulbarga University, Gulbarga
2. Osmania University of Hyderabad
3. Central University of Hyderabad
4. Bangalore University, Bangalore
5. Mysore University, Mysore
6. DDPI Office of Gulbarga District
7. SSA Department of Gulbarga District.

The above mentioned institutes, offices, and universities were a good source of information. Discussions held with the officials and the experts in the field have benefited to understand the scenario of present research study effectively.

3.4. Population of the Study:

The present study seeks to understand the situation with regards to primary education in rural and urban areas of the District Gulbarga in the state of Karnataka. Therefore, the population or the universe of the study is the rural as well as urban areas of the Gulbarga district.
GULBARGA DISTRICT MAP
The total number of schools (population) of the Gulbarga District is as listed below:

**Table – 3.2: Total Number of Government Schools in Different Blocks of Gulbarga District**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Blocks</th>
<th>G LPS</th>
<th>G HPS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Afzalpur</td>
<td>106</td>
<td>118</td>
<td>224</td>
</tr>
<tr>
<td>2</td>
<td>Aland</td>
<td>115</td>
<td>222</td>
<td>337</td>
</tr>
<tr>
<td>3</td>
<td>Chincholi</td>
<td>174</td>
<td>144</td>
<td>318</td>
</tr>
<tr>
<td>4</td>
<td>Chitapur</td>
<td>148</td>
<td>233</td>
<td>381</td>
</tr>
<tr>
<td>5</td>
<td>Gulbarga North</td>
<td>130</td>
<td>262</td>
<td>392</td>
</tr>
<tr>
<td>6</td>
<td>Gulbarga South</td>
<td>102</td>
<td>280</td>
<td>382</td>
</tr>
<tr>
<td>7</td>
<td>Jewargi</td>
<td>146</td>
<td>161</td>
<td>307</td>
</tr>
<tr>
<td>8</td>
<td>Sedam</td>
<td>128</td>
<td>153</td>
<td>281</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1049</strong></td>
<td><strong>1573</strong></td>
<td><strong>2622</strong></td>
</tr>
</tbody>
</table>

Source: Census, 2011

The above table shows the total number of government lower primary and higher primary schools of Gulbarga district. The total number of lower primary schools in all eight blocks is 1049, higher primary schools are about 1573 and total number of lower primary and higher primary schools is 2622.

**Table – 3.3: Grade Wise Enrolment in Primary and Upper Primary Schools from 2006 – 2011 and Dropout Rate**

<table>
<thead>
<tr>
<th>Grade</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>Dropout Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>91,019</td>
<td>56,417</td>
<td>61,513</td>
<td>63,017</td>
<td>64,552</td>
<td>7.3</td>
</tr>
<tr>
<td>II</td>
<td>85,926</td>
<td>51,887</td>
<td>59,914</td>
<td>62,224</td>
<td>60,292</td>
<td>6.4</td>
</tr>
<tr>
<td>III</td>
<td>77,807</td>
<td>51,661</td>
<td>59,340</td>
<td>61,693</td>
<td>59,739</td>
<td>6.3</td>
</tr>
<tr>
<td>IV</td>
<td>74,569</td>
<td>46,028</td>
<td>53,485</td>
<td>57,405</td>
<td>59,210</td>
<td>7.0</td>
</tr>
<tr>
<td>V</td>
<td>70,300</td>
<td>43,822</td>
<td>50,735</td>
<td>55,339</td>
<td>55,510</td>
<td>10.5</td>
</tr>
<tr>
<td>VI</td>
<td>56,696</td>
<td>35,830</td>
<td>41,589</td>
<td>46,869</td>
<td>51,633</td>
<td>6.5</td>
</tr>
<tr>
<td>VII</td>
<td>48,996</td>
<td>32,193</td>
<td>37,182</td>
<td>43,145</td>
<td>45,254</td>
<td>-</td>
</tr>
<tr>
<td>Total PR</td>
<td>329,321</td>
<td>205,993</td>
<td>234,252</td>
<td>244,339</td>
<td>243,793</td>
<td>7.5</td>
</tr>
<tr>
<td>Total UP</td>
<td>175,992</td>
<td>112,846</td>
<td>129,506</td>
<td>145,353</td>
<td>152,397</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Elementary Education in India – Where do we Stand? District Elementary Education Report Card 2010-11
The above table shows the grade wise enrollment in primary and upper primary schools of Gulbarga district. The enrollment in grade 1st in 2006-2007 is about 91,019 has drastically decreased in 2010-2011 about 64,552. The total enrollment in 2006-2007 in grade 1st is about 329,321 in primary schools has decreased in 2010-2011 in grade 1st is about 243,793. The total enrollment in grade 1st in 2006-2007 is about 175,992 in upper primary schools has decreased in 2010-2011 is 152,397. The dropout rate is measured high in all years is in V standard about 10.5. The total dropout rate in primary school is about 7.5.

Table – 3.4: Block Wise Total Number of Households of Gulbarga District

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Taluks</th>
<th>Total No. of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td>1</td>
<td>Afzalpur</td>
<td>3336</td>
</tr>
<tr>
<td>2</td>
<td>Aland</td>
<td>5691</td>
</tr>
<tr>
<td>3</td>
<td>Chincholi</td>
<td>3057</td>
</tr>
<tr>
<td>4</td>
<td>Chitapur</td>
<td>21806</td>
</tr>
<tr>
<td>5</td>
<td>Gulbarga</td>
<td>73845</td>
</tr>
<tr>
<td>6</td>
<td>Jewargi</td>
<td>3253</td>
</tr>
<tr>
<td>7</td>
<td>Sedam</td>
<td>7463</td>
</tr>
</tbody>
</table>

Sources: Census as per 2011

The study selected all the eight educational blocks, namely Afzalpur, Aland, Chincholi, Chitapur, Gulbarga North, Gulbarga South, Jewargi and Sedam. The study has taken the school as unit of study. Each school has school infrastructure, the teachers, students, parents, the SDMC, and dropout
children as totality. After selecting the schools the researcher concentrated to collect the data from all these sources.

3.5. Sampling Design:

The sample selection adopted is a multistage random sampling method, where in all the blocks of the district are taken at the first stage. In the second stage from each block randomly two schools selected from the list of urban sector and three schools from rural sector. During the third stage the researcher selected the teachers, students, SDMC members, families of the selected school participants. The dropout child houses were specifically searched in the field by screening houses and special efforts were made to identify around the selected schools. The details of sample are pictorially represented as given below:

Total No. of School Selected = 40

Chart – 3.1: Pictorial representation of sample school
### Sources of Data

1. One Teacher Interviewed in each school
2. Group Discussion with Available Teachers
3. All Class Room Observation
4. Interaction with Students
5. 3 R Test with Sample of Students of V Std
6. Twenty Houses from Around Each School
7. Three SDMC Member From Each School
8. Interview with available drop outs

### SAMPLE OVER VIEW

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Schools</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Teachers</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>SDMC Members</td>
<td>120</td>
</tr>
<tr>
<td>4</td>
<td>Parents</td>
<td>800</td>
</tr>
<tr>
<td>5</td>
<td>Drop Outs</td>
<td>270</td>
</tr>
<tr>
<td>6</td>
<td>5th Std. Students</td>
<td>800</td>
</tr>
</tbody>
</table>

### 3.6. Tools Used for the Study:

As per the need of the study following tools are prepared and used for the purpose of data collection. They are as follows:

1. School observation schedule
2. Interview schedule for teachers
3. Interview schedule for SDMC members
4. Interview schedule for parents
5. Interview schedule for dropouts
6. Achievement test in mathematics
7. Achievement test in language (Kannada)
3.6.1. Schematic Representation of Tools and Source of Data:

Chart – 3.2: Major facets of structured interview schedule for dropout children

![Diagram of dropout factors]

Chart – 3.3: Major facets of structured interview schedule for school teachers

![Diagram of teacher factors]
Chart – 3.4: Major facets of structured interview schedule for SDMC member

Chart – 3.5: Major facets of structured interview schedule for parents
3.6.2. Development of Observation Schedule:

Observation is the basis of all good research. Observation may be structured or unstructured and is vital for understanding the context of data, as well as for writing an interesting and believable research report.

Observation schedule was developed to observe the school facilities, enrollment and retention. In order to develop the school observation schedule, as a pilot study, a few schools were visited. The facilities available in these schools were noted down. School teachers and other staff were also contacted in order to know the existing facilities and utilization of these facilities.

Besides, carefully reviewing the facilities essential for teaching, at this level, a list of desirable facilities was prepared. The list of objectives was analyzed for the retest of data required. The pilot observation, the review of related literature and analysis of objectives provided a detailed list of items. All the items list were reorganized in order so as to inquire in a convenient format of availability of data in school observation schedule. The list so prepared has suitable spores was the draft observation schedule. This schedule was provided to some experienced teachers/experts with the view to finally retain essential facilities in the observation schedule. On the basis of the opinions of the experts the school observation schedule was finalized.
3.6.3. Development of Interview Schedules:

Interview became a vital tool to gather valuable information from field work. Interview is a means of data gathering information through conversation between researcher and participant. Along with other methods, the most common method used in researching with children is the interview in one form or another. Interview gives the opportunity to step in to deeper and related issues of a particular topic and also allow a more thorough examination of experience, feeling or opinion that close questions never hope to capture.

After reviewing the related literature and the tools used by different researchers, it is decided to develop the interview schedules for data collection procedure. The investigator had preliminary conversation with data providing personnel and had fair knowledge and understandings of socio-economic and cultural context of the study area. The list of objectives was analyzed for the retest of data required. The pilot observation, the review of related literature and analysis of objectives provided a detailed list of items. All the items list were reorganized in order to inquire in a convenient format of availability of data in interview schedule. The list so prepared has suitable spores was the draft interview schedules. The schedules were provided to some experienced subject experts with the view to finally retain the schedules in terms of objectivity, authenticity, reliability and validity. On the basis of the opinions of the experts the interview schedule was finalized. The schedules were tryout on few data providing personnel to check the objectivity,
authenticity, reliability and validity then the flaws and ambiguities in the schedules were discarded. And final format of schedule were prepared by researcher.

3.6.4. Structured Observation Schedule for School:

The School Observation Schedule is a structured schedule contains various items pertaining to school infrastructure and basic amenities in the school. There are twelve items including general information about the school, highest class offered by the school and total enrollment in each class. Fifteen items were included in infrastructural facilities and educational facilities such as; drinking water facility, toilet facility, electricity facility, playground, library facility, mid day meal scheme, free uniform and text books and scholarship facility. Five items were included in general physical condition of classes of the school such as quality of black board, quality of teacher’s chair, quality of student’s desk, students mat and cleanliness in the class.

3.6.5. Structured Interview Schedule for School Teachers:

The interview schedule for teachers is a structured schedule contains various items pertaining to the opinions of teachers towards the school and the phenomenon of Drop-Out. There are seven items including general information about the respondent such as name, gender, qualification, work experience, total number of students in each class, and total no. of classroom in school. There are twenty five items in family and personal factors of dropout phenomenon such as poor economic condition of the family,
illiteracy and negligence of parents, migration to earn for livelihood, child labour, problem of girls education, and health problem of the children.

There are thirty five items in academic and co-academic factors of dropout phenomenon such as learning difficulties of students, lack of interest towards the studies, irregularies of the students, unattractive curriculum, grade repetition and transaction to other school. There are twelve items in infrastructural facilities such as drinking water facility, common toilet facility, girl’s toilet, library, playground, electricity, computer, compound wall, desk or mat for students. And four items regarding government educational schemes like; mid day meal scheme, free text book, free uniform and scholarship. Another item was included about dropout problem and performance of the school. Five items were included about the roles of SDMC members and parent teacher association. There are eight items regarding environmental and social factors of dropout phenomenon including peer influence, isolation from group and caste and class.

3.6.6. Structured Interview Schedule for SDMC Members:

The interview schedule for SDMC Members is a structured interview schedule contains various items pertaining to the opinions of SDMC members towards the school and the phenomenon of Drop-Out. There are ten items in general information regarding name, gender, religion, caste, level of education, occupation of the respondent. Few more items were added about the SDMC meeting and issues discussed in the meeting. There are few factors which are responsible for dropout phenomenon such as family and personal
factors which are consist of sixteen items on migration, child labour, girl’s education, etc. There are twenty five items about academic and co-academic factors including absenteeism, infrastructural facilities, educational schemes, difficulties in implementing these facilities, kitchen for preparing meal, maintenance of hygiene of kitchen and dropout rate of the school, gender wise dropout rate, steps to control dropout rate of the school and support system from teachers, parents, and children in this regards, and also include parent teacher association and issues which was discussed in the meeting.

3.6.7. Structured Interview Schedule for Parents:

The interview schedule for parents is again a structured interview schedule contains various items pertaining to socio-economic background of the household, family structure, member composition, education status of each family member, parent’s opinion about the children’s education and their opinion about the teacher and school etc. there are forty seven items about family and personal factors regarding the dropout phenomenon. Family background consist of name of the parents, their religion, caste, type of the family, type of household, member composition, education status of each family member, poor economic condition of the family, occupation of parents, total income and expenditure of the family. Fifteen household items included in economic condition of the family. Few items were included in illiteracy and negligence of parents, their educational status, their opinion about the education of their wards. Six items were included about their experience of seasonal migration. Four items were included about the child
labour issue, seven items about the girl child education and four items were included about the health problem of their wards.

In academic and co-academic factors of dropout phenomenon there are thirty items were included such as learning difficulties, lack of interest in studies of their wards, absenteeism, and their grade repetition, unattractive curriculum and remedial teaching provided by the teachers. Eleven items were included in infrastructural facilities such as drinking water, toilet facility, library, play ground, computer facility, etc. four items were included in educational schemes such as mid day meal, free text book, free uniform and scholarship. Four items were included about role of SDMC members and parent teacher meeting. Ten items were included in environmental and social factors of dropout phenomenon, peer influence on their wards, isolation from the group, restriction imposed by caste and class towards the education of their wards.

3.6.8. Structured Interview Schedule for Dropouts Children:

The interview schedule for Drop-outs is again a structured schedule contains various items pertaining to opinion about the children’s education, economic condition of the family and their opinion about the teacher and school etc. in relation to the phenomenon of Drop-out. There are eleven items in general information about respondent like name, age, gender, type of school, nature of dropout, standard from which dropout, year of dropout, medium of instruction in the school, distance of the school, decision maker in not sending to school. As we already discuss about the three factors of
dropout phenomenon such as family and personal factor, academic and co-academic factor, environmental and social factors. There are forty three items about these issues like migration with parents, experience of household work or other field work, their willingness to go back to school, their opinion about their school, feeling in secure while going to school(for girls dropout), subject wise learning difficulties, reason for their absenteeism, and their opinion about infrastructural facilities and different educational schemes in the school, impact of peers on their disengagement from school, feeling of isolation from peer group, their feeling of inferiority in the class due to their caste or class, restriction imposed by their community about their education etc.

3.6.9. Achievement Test in Mathematics:

Achievement test in mathematics for V class is prepared by the researcher as the present study is looking at achievement levels of children studying only in class V during the time of survey. The items in the achievement test were selected on the basis of expert opinion and content analysis of the class III mathematics text book. The achievement test so constructed is tried out for its usability and viability with class V students before its actual usage in the sample schools.

3.6.10. Achievement Test in Kannada:

Achievement test in Kannada (Language) for V class is prepared by the researcher as the present study is looking at achievement levels of children studying only in class V during the time of survey. The items in the
achievement test were selected on the basis of expert opinion and content analysis of the class III Kannada text book. The achievement test so constructed is tried out for its usability and viability with class V students before its actual usage in the sample schools.

3.7. Data Collection Procedure:

The present study is using the tools as mentioned above. For the purpose of the field study, selected school from school-list identified at first stage. The researcher herself decided to visit and collect the data.

Initially the schools were geographically traces for the visiting route. A pilot visit was undertaken for some of the schools. For full fledges data collection the researcher planned a week visit to each school as given below:

**Day One**: Introduction, Cursory look around the school, identification of teachers and other personnel who are potentially good enough to provide required information, Rapport building with students. Visit around the village and note making.

**Day two**: School records noting, absenteeism observation actual in class and as per records, filling up observation schedule, Interview with teachers, Identification of SDMC members available in the village and discussion with them.

**Day three**: Achievement test administration, Identification of dropout students around the village, rapport building with parents.

**Day four**: Visit to village parents and interviewing the parents and dropout children.
Day five: Interviewing with SDMC members and left over work of previous days.

Day Six: Additional day for emergency like holidays, and non availability of members, manage with problems like non-reach ability due to rain, summer, holiday, strikes, teachers non availability etc.

The researcher has spent almost one and half year in data collection excluding the school summer and winter holidays.

Then with the help of teacher the information required as per the interview schedule for teachers is collected. The researcher observed all the class rooms of the school and note down the detail information pertaining to school attendance and infrastructure facilities in school observation schedule. Further, achievement tests in Mathematics and Kannada are administered to children currently studying in class V. All children of class V, present on the day of school-visit are considered for administration of the tests. The SDMC members are interviewed on different aspects of school infrastructure, attendance patterns of students, school dropouts and SSA facilities. The researcher visited households nearby vicinity of 500 meters of sample school and collected information from households, and interviewed the dropouts accessible. Consistently not attending children were interviewed. The data collected is tabulated and analyzed as per the requirements of the study.
3.8. Data Analysis Procedure:

The data was both qualitative and quantitative. The quantitative data available was digitized and processed to the excel sheets. Further it is processed for percentage analysis. The qualitative data was critically analyzed for uniformities, peculiarities and contradictions. SPSS 20 software was employed for statistical analysis of data. The data will be included percentage analysis and graphical presentation to arrive at conclusions for generalization in the light of objectives. Details of analysis are presented in the next chapter.