Summary

The work presented in this thesis concerned with presenting a systematic view Distance education. Education is a fundamental human right and essential for the exercise of all other human rights. The study has been divided into five chapters.

Chapter 1 presents various aspects of Distance education like its definition, types, its history in Indian and international context, etc. This chapter covers all theoretical concepts of Distance Education and unveils the significance of Distance Education. In the today’s world, Open and Distance Education (ODE) system has been gaining widespread popularity. India possesses a developed higher education system, which offers facility of education in almost all aspects of human creative and intellectual endeavors. The institutional framework consists of Universities established by an Act of Parliament as Central Universities or of a State Legislature as State Universities and, Deemed Universities, Institutes of National Importance, Institutions established under State Legislative Act and colleges affiliated to the University both government-aided and unaided, As on 31st March 2016,in India 749 University level institutions including 46 Central Universities, 345 State Universities, 123 Deemed Universities and 235 private Universities and Institute of National Importance (INI) is a status that may be conferred to a public higher education institution in India by an act of parliament As of 23 April 2015 the Ministry of Human Resource Development has listed 74 institutions under this category. There are at present one National Open University,13 State Open Universities and 98 Directorate (DEIs/DDEs) as on 16 September 2016, set up by the respective state grants, are single mode institutions, which means they provide education only in the distance mode. These universities cater to people who are unable to pursue regular courses due to various reasons.The top 7 States in terms of highest number of colleges in India are Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Tamil Nadu and Telangana.

Chapter 2 This chapter provides a perspective and relevance to the problem briefly discussing the findings of other related studies done in country and abroad. It also compares various studies done by different researchers and eventually establishes the fact that Indian research literature suffers from a distinct big gap relating to a lack of in –
depth studies on Distance Education. Distance learning courses offer convenient alternatives to students who want to earn college credit but are not able to attend traditional classes. Taking courses in a distance learning format is a viable option for students who have scheduling conflicts, work or family commitments, or live too far away from a college campus. Most distance learning courses have the same content as traditional courses and are equivalent to their classroom counterparts.

Distance learning courses differ from traditional classroom courses in three major ways: time and place, delivery, and interaction with faculty and other students. Open Universities in India provide the facility of distance education to people who are unable to pursue regular courses. These universities offer undergraduate, post graduate and doctoral programme.

Many author and researcher give their views on distance learning not in India but in abroad also. Every year number of research conducted worldwide. Education play a vital role in development of any country, so that it’s take more attention of People of any country. India is a big country; about 50 percent of people are youth (14-35 yr.) so that to provide good education to everyone distance learning play a significant role.

Chapter 3 presents statement of the problem, indicating the objective and the purpose of study. It unfolds the reasons why it is worth studying role of Distance Education in Indian education system context and why its significance for the society. It further presents method of data collection and techniques of data analysis used in studying the problem and consists of description about the population all around the country, how the samples were selected from populations, indicates the procedure followed in collecting the data, describes design and pre testing of the questionnaire/ schedule, editing, codification of data and finally gives a brief account of the statistical techniques used to analyze the data.

This chapter comprises research methodology and its application in answers to research problem. We need to have a good research methodology in place when trying to figure out a new idea. “Methodology” implies more than simply the methods you intend to use to collect data. It is often necessary to include a consideration of the concepts and theories which underlie the methods. When we describe methods it is necessary to state
how we have addressed the research questions or hypotheses. The methods should be described in enough detail for the study to be replicated, or at least repeated in a similar way in another situation. Every stage should be explained and justified with clear reasons for the choice of your particular methods and materials.

This chapter particular attempt will be made to define the research problem profiling of the population and the sample taken from the specified population for this study.

### 3.1 Object of Research - “An analysis of Distance Education in the Implementation of Universal Education in India”

#### 3.1.1 Sub Objectives

- 3.2.1. To analyze the effect of distance education in Indian education system.
- 3.2.2. To analyze the challenges of distance education
- 3.2.3. To analyze the Participation of women in distance education.
- 3.2.4. To analyze the Scope of Distance education in future.
- 3.2.5. To analyze the quality of education in distance mode

### 3.2 Hypothesis Formulation-

Ordinarily, when one talks about hypothesis, one simply means a mere assumption or some supposition to be accepted or rejected. But for a researcher hypothesis is a formal question that he intends to resolve. Thus a hypothesis may be defined as a proposition or a set of proposition set fourth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts. Quite often a research hypothesis is a predictive statement, capable of being tested by scientific methods, that relates an independent variable to some dependent variable.

- **H₀₁.** There is no significant effect of distance education in Indian education system.
- **H₀₂.** There is no significant difference in opinion of students about quality of education in Distance Education in India.

### 3.3 Area of Research

We collected Secondary data from IGONU, 11 State Open Universities and 71 Dual mode Universities from various part of India. Who provided distance education from 2009-10 to 13-14. Also collected primary data from students enrolled in distance mode of
education to know their opinion regarding quality and other parameters of distance education.

3.4 Sample Unit: Sampling unit contains the particular units being studied and which generally reflects the desired response that is most of the traits that the universe has.

3.5.1 Secondary Data Source

- Total 83 universities selected to collect data from all over India.
  1 Nation Open University
  11 State Open University
  71 Dual Mode Universities

3.5.2 Primary Data Sources

- Total 500 respondents fill the online and offline questionnaires, who are/were a part of distance education from various part of the country.
- Link of online questionnaires, -
  https://docs.google.com/a/shobhituniversity.ac.in/forms/d/e/1FAIpQLSeJyP8_-QG6isJMikwZC0uYv3rMst8hyLnFer0stS28RW-Zng/viewform

6. Statistical Analyses:

3.6.1 Chi-Square Test for Independence

This lesson explains how to conduct a chi-square test for independence. The test is applied when you have two categorical variables from a single population. It is used to determine whether there is a significant association between the two variables. For example, in an election survey, voters might be classified by gender (male or female) and voting preference (Democrat, Republican, or Independent). We could use a chi-square test for independence to determine whether gender is related to voting preference. The sample problem at the end of the lesson considers this example.

3.6.2 Measures of Association: Nominal data--Phi and Cramer's V

- Measures of Association calculate the strength, and for ordinal variables the direction, of the relationship between two variables.
- **PHI**: Used to measure the strength of the association between two variables, each of which has only two categories. (It applies to $2 \times 2$ nominal tables only).

- **CRAMER’S V**: Used to measure the strength of the association between one nominal variable with either another nominal variable, or with an ordinal variable. Both of the variables can have more than 2 categories. (It applies to either nominal $\times$ nominal crosstabs, or ordinal $\times$ nominal crosstabs, with no restriction on the number of categories.)

**Chapter 4**: has been exclusively devoted to analysis of data and findings. Analysis of data and findings has been divided into two parts viz. Analysis of data finding- which deal with interpretation of data analyzed and collected from various distance education universities and Part II, which deal with interpretation of the data analyzed and collected from student who are/were part of distance education. Second part has been presented in 80 tables and 2 hypotheses and its sub hypothesis. An extensive in-depth study has been done on opinion regarding quality of education, Course material, examination transparency etc, Phi and Cramer's V test have been extensively used to measure difference in opinion of students based on various demographic factors across. Appropriate hypotheses to measure variation were formulated for this purpose.

Distance education has become a useful mode of obtaining degrees for a large number of students who are staying in far off and remote areas and for whom accessing universities on regular basis is still a dream. India has the distinction of having introduced distance education, in the form of correspondence education, nearly four decades back at the tertiary level and 35 years ago at the secondary level. In view of the increased demand for higher education, many universities were not in a position to provide quality education. A scheme of correspondence education was included in the Third Five Year Plan (1960-1965) and an expert committee was constituted in year 1961 to work out. India has had impressive success in improving its education system, particularly in expanding facilities and increasing participation. The incredible expansion in the number of institutions at different levels has led to a phenomenal increase in access and student numbers.
Chapter 5 has been devoted to interpretation of findings in which the researcher has expressed his views about the observations made during the study. This takes into consideration the explanations for various findings made during the study and also correlate the findings of the present study with the findings of the studies made by other researchers. Interpretations of the findings have been done in two different parts viz. interpretation of Findings- Part 1: Secondary data– Part 2: Primary data.

This chapter also describes tentative conclusions drawn from the study and ultimately indicates the shortcomings and limitations of the study. Lastly, this chapter gives suggestions to the universities, government, regulatory authorities, students, who have keen interest in this area.

Findings

This chapter includes analysis of data and finding of the study on distance education. The interpretations have been divided into two parts viz Part 1, which deal with interpretation of data analyzed and collected from various distance education universities and Part 2, which deal with interpretation of the data analyzed and collected from student who are/were part of distance education. The chapter further deals with conclusion drawn, limitation of study and suggestions for further researcher, practitioners, government, and regulatory bodies.

This section relates to the interpretation of the data of the study related to the distance education. The discussion and interpretations have been made taking consideration the major finding about 83 distance universities selected from different part of the country. As discussed in chapter 3.

1. Role of Distance education in Indian Education System:

India holds an important place in the global education industry. The country has more than 1.4 million schools with over 227 million students enrolled and more than 36,000 higher education institutes. India has one of the largest higher education systems in the world. However, there is still a lot of potential for further development in the education system. India has become the second largest market for e-learning after the US.
(i) One National Open University, 13 State Open, there are 98 Dual mode Universities, which offer education through distance mode also. Out of 112 Dual mode Universities, 18 are in Tamil Nadu. Among major States, in Jharkhand, neither there is any Open University nor any Dual Mode University.

(ii) An additional factor behind the current predicament is the ballooning of the number of universities since the 1960s. Extensive changes were made to the from one open university in 1992 it was reached to 256 open universities in 2009 but after five year now in 2014-15 this figure declined to 114 open universities in India, it is no wonder that an increasing number of universities are now struggling under enrollment. The rate of enrollment in higher education, meanwhile, has consistently risen over recent years in the 2009 total participation in higher education was approximately 30 per cent but in 2014-15 it was only 10.47%.

(iii) In 2009-10, around 20.88 million people were enrolled in distance education in India, followed by approximate 24.65 million in 2010-11, approximate 26.76 million in 2011-12, with a huge increased of approximate 50% with 34.21 million in 2012-13 and 28.49 million in 2013-14.

(iv) There are more than 70% universities running in Private sector; aided and unaided taking together, but it caters approximate 60% of the total enrolment in 2009-10 and 2010-11 and decreased to approximate 55% in 2011-12, approximate 53% and in academic year 2013-14 it was only approximate 46%. It shows lower per universities enrolment in aided and unaided Universities.

(v) Linear Trend shown that total enrolment in distance education has increased initially, while enrolment among female was not up to mark and increased slightly. The enrolment among males students has increased tremendously at steady rate from 2009-10 to 2011-12 and in 2013-14 it was higher but it has declined at faster rate in year 2013-14 due to some factors. Over all analysis represented that value of $R^2$ for Female and total enrolment is good but while for male it was not a good fit.
2. Women Participation in Distance Education:
India has a population of about 1.34 billion people of which 65.2 cr. (48%) are women (According to the United Nations in July 2016). The country’s literacy rate is about 74.04 per cent. There is a wide gender disparity in the literacy rate in India in 2011 were 82.14% for men and 65.46% for women (age 7 and above). Its indicated that census provided a positive indication that growth in female literacy rates 11.8% was substantially faster than in male literacy rates 6.9% in the 2001–2011, which shown the gender gap appears to be narrowing. Issues affecting women include poverty, health, domestic violence, divorce and marriage break up, cross border trading and economic hardships being evident in both rural and urban. Within the context of rapid technological change and deteriorating economic conditions, the Indian education system is challenged with providing increased educational opportunities without increased budgets. The enrollment of women students shows an upward trend.

3. Scope of Distance Education:
(i) Now students can pursue two Degree courses at Same Time
The University Grants Commission has finally given the go-ahead to students to pursue two degree programmes simultaneously. Giving in to long-standing demands from universities and students, the apex higher education regulator, at a meeting on July 31, 2013, decided to accept its expert panel’s recommendations on permitting pursuit of an additional degree programme. This will allow students enrolled in a regular full-time degree programme to pursue one more additional degree programme simultaneously on open/distance learning mode from the same university or another institution.

Findings on Primary Data
Students Opinion towards Distance Education (based on demographic variables):

After studied various factors we can conclude that there is a significant difference observed in opinion of students on various demographic factors (Age, Sex, educational qualification, occupational status) so that null hypothesis rejected there is a significant difference in opinion of students about quality of education in Distance Education in India. Some finding are:

(i) This study is based on different demographic factor like age, sex, qualification and employment status. It was statistically establish that there exist a difference of opinion of respondent in different gender and employment group regarding reason to chosen distance education programme .most of the male(about 46.6 per cent) selected distance education programme because of worked schedule but female respondent were have mixed response because of work schedule(33.3 per cent) and on campus classes was full(30.1 per cent).Apart from this different employment status employed and businessman(41.8%) selected distance education because of work schedule(53.9 per cent),unemployed(31.2 percent selected distance education because of on campus classes was full.

(ii) I observed that there were Significant difference was observed in opinion of respondent with different gender, educational and employment status opinion about mode selected for distance education. Most of the respondent didn’t have similar response in different groups. Most of the male respondents were in favored of selecting correspondence education as a mode but mix response sown by female respondent they were selected correspondence as well as MOOC as a mode of education. In different educational group 33.2% of Undergraduate students, 22.8% Post graduate selected correspondence mode but 51.9% of Ph.D/M.Phil students selected Mooc as mode of education. Also in different employment group respondent 40.0% of employed and 45.5% of
businessmen were in favour of correspondence mode but 33.9% of employed (on study leave) and unemployed opted MOOCs as a mode of education. 

(iii) Significant difference was observed in opinion of respondents in comparison of regular mode to distance mode, respondent did not have similar opinion regarding ease in distance education. Most of the respondent were of 16-20 age group feel that (36.0%) both regular and distance have same level of difficulty, about 50% of respondent of 26-30 age and 55.6% of 36 & above age group think that distance education is easier than regular mode. In gender wise opinion both Male and female have no difference in opinion the think that both programme had same level of difficulty. But different qualification status group and employment status group shown difference in opinion 37.1% of undergraduate think both programme had same level of difficulty but others feel that distance programme is easier. 33.3% of employed people think that distance education is difficult then regular mode but the other group in employed think that both have same level of difficulties.,

(iv) It was statistically established that in the opinion of respondent to attended college or university before joining distance education programme no difference shown in different age, gender and qualification group about 70% of them was a part of regular college or university before joined distance mode. Most of them attended college in full time only few were a part of part-time programme. Presently in India about 88% of student enrolled in regular mode enrollment in distance mode is only approximately 12 per cent only. Most of student selected distance education as a mode of education having some specified objective.

(v) It was found that there was no difference in opinion of respondent about distance learning programme offer convenient alternatives to those who cannot a part of regular and formal education. Respondent who were from different age, gender, qualification, and employment groups have similar opinion they are agreed with the statement. Distance education is an alternative to those who live in a geographically challenged area. There are
many people in India who live in areas from where the university or college is quite far so distance education is good option for them.

(vi) It was statistically established that opinion about distance education gives more flexibility to learner there is no significant difference in opinion of respondent as for as demographic variable age, sex, education and employment status. One half of respondent agreed that distance education gives more flexibility to learner. There are various reason behind it. First, admission is flexible. We do not discriminate on the basis of the marks scored by a student in his last examination. Secondly, open universities do not restrict a student from taking admission on the basis of his/her age. Third, Students can choose timing; they can continue his job and study at the same time. It provides flexibility with regard to the number of years in which you can complete the course that you have opted for. For example, in IGNOU you are free to complete a three-year course in 5 to 6 years. Fourth, is it is economically viable though the standard of education provided by open universities is as good as that provided by conventional universities.

(vii) It was statistically established that there is no difference in opinion of respondent as for as demographic variable age, sex, education and employment status. A similar response shown by respondent in method used for evaluating student performance in distance mode most of respondent told that formative and summative method used for evaluation. Formative assessment the goal of formative assessment is to monitor student learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning.

(viii) Significant difference was observed in opinion of respondent groups with different educational and employment status. This means that not everyone may have similar opinion regarding the time frame allotted to complete distance learning programme 45.2 per cent of undergraduate and 45.8 percent of others qualification founded time frame reasonable., apart from that 52.1 per cent of post graduate and 55.6% Ph.D/M.Phil students founded too long.
In Employment status 59.4 per cent of employed feel that time frame is reasonable to complete the course but employed (on study leave), unemployed business man and retired found it too long.

(ix) It was statistically established that there is significant difference in opinion of respondents regarding workload in distance courses. Most of the respondent feel that workload in distance education was appropriate challenging because most of the students evolved in doing job or earning for livelihood. So they didn’t have time for studied. Depending on the format, distance education can often create an overwhelming workload for students. Regarding the online teaching, the workload increases with the increase of the number of students. According to Dibiase et al (2005) an increase from 18 students in a class to 49 students increased course-related workloads from 47.5 hours to 116.7 hours total.

(x) In India there has been always confusion between the authority and validity of a degree awarded under an Open and Distance Learning. Lack of awareness amongst the public) at large means there exist false notions. It was statistically found that there were no significant differences in opinion of respondent as for as demographic variable age, sex and educational status, about one half of respondent agreed with the statement. But there is significant differences shown on various employment status 40 percent of business man and 33.3 per cent of retired persons were in dilemma. Through the examinations students develop the ability to express his thought in a manner that other can understand it. Examinations also reflect that student has acquired a certain amount of knowledge in any field of study. Examinations teaches also a lot of things like punctuality, writing skills timing sense and expressing their thoughts and opinions. Without Examination it is very hard to find out the real knowledge of individual students as well as student will lose their motivation with their studies. It was found that there is no differences in opinion of the respondent regarding rely on the examination procedure and transparency of the distance education system. About forty per cent of respondent were agreed
with the examination procedure but a big per cent (60%) of respondent were disagreed or in dilemma regarding the examination procedure.

**Conclusion:**

India has more than 50% of its population below the age of 25 and more than 65% below the age of 35. It is expected that, in 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan; and, by 2030, India's dependency ratio should be just over 0.4. India holds an important place in the global education industry. The country has more than 1.4 million schools with over 227 million students enrolled and more than 36,000 higher education institutes 750 universities. India has one of the largest higher education systems in the world. However, there is still a lot of potential for further development in the education system. Development is a process of structural change in the cultural, economical, political, social domains. It starts with people, their education and capabilities because people are the primary and ultimate focus of all development. The broader goal of development is to bring the entire population into the mainstream of the national development process, both as contributors and beneficiaries. Development is the development of an individual, each according to his or her potential and in this sense education is a crucial aspect of development. Large increase in population coupled with a growing awareness of the benefits of education are leading governments to explore the possibility of using alternative means to provide education on a large scale, particularly as conventional educational methods are becoming increasingly expensive. One such alternative that countries in the region are considering is Distance Education. India is the seventh largest and the second most popular country in the world. About three-quarters of the population live in villages and their main occupation is agriculture. India achieved Independence in 1947 and has adopted a parliamentary form of government based on universal adult franchise and a mixed economy. India had made notable advances in various sectors, but still is a developing country. Distance Education in India has a history of nearly three decades. Persistent efforts have been made by both government and voluntary organizations to achieve universal literacy and expand opportunities for female education.
The following are the impact of Distance Education on learners drawn from responses of the sample.

- Improved their career opportunities
- Attained more degrees for satisfaction
- Updated their skills
- Second chance of learning for disadvantaged or compelled dropout
- More opportunities for networking and communicating
- Vision broadened
- Flexibility in time and space
- Gives more freedom to the learner and extends the campus into the people's home and work places.
- Assists in facing the challenges in life of women
- Increased the literacy rate of the country and State
- Leads to empowerment of women.