CHAPTER – IV SECTION – I

INTRODUCTION OF PRINT MEDIA AND ELECTRONIC MEDIA.

4.0 Introduction

Recording and storing information on Print Media and Electronic resource media is an integral part of constitutes the study of the influence of Information Communication Technology in Library and Information Science.

4.1 History of Recording Media

In the earlier writing material was used on the stone on which the ancient Egyptian carved their characters with chisels. This led to the development of the most widely used writing materials before the invention of paper.

• Early Efforts

The first writing material was stone, and the first pens were implements for scratching, engraving and painting on the surface. The earliest known man-made marks of this kind are still visible in the caves of Altamira and Lascaux and on the rocks at Tassili. This evidence gives us a history of writing surface of some 8000 years. This was the first attempt by man, to discover newer avenues of expression other than speech.

Clay Tablets

When it became necessary to record the minor transaction in something more portable than cave walls and lighter than stone blocks, the Sumerians of Mesopotamia incised clay tablets and hardened them by baking. These tablets were indestructible and could be seen even today in museums. The jabbing action of a stylus into the damp clay produced a wedge-shaped impression with the result that the name 'Cuneiform' writing came to be applied to this particular form. The shapes and sizes of the tablets varied considerably.

Metals

After the clay tablets, for quite some time metals such as lead, copper, brass and bronze were used to write upon, the letters being incised with some form of sharp, painted instrument.

However, the source of supply of metals was limited, writing on them was timeconsuming, but a permanent record could be made which could not be erased and reused.

• Linen

Linen is also known to have been used by the Egyptians and later by Romans. This was soon discarded as writing on linen was quite difficult and time consuming.

• Wooden Boards

The Egyptians, Greeks and Romans, all in turn used wooden tablets on which writing was done with a stylus but in the Grecian and Roman empires, the commonest method of writing was with a stylus upon wax-covered wooden tablets. The latter could be used continually, as it was easy to melt the wax, to provide the fresh writing surface.

The most widely used writing materials before the invention of papers were papyrus, parchments, and vellum.

Papyrus

The writing material was manufactured from the stalks of the papyrus, a tall flowering plant which in ancient times grew plentifully along the banks of the Nile. It was prepared by cutting the stalks into two-foot lengths and splitting them downwards into water-thin strips with a needle or sharp knife.

Papyrus was introduced as a writing material by the Egyptians in about the third millennium B.C. and was regularly used by them until long after the introduction of parchment.

Papyrus was made up in various forms, the earliest being the single leaf or sheet prepared as described above. Books were made in long rolls assembled by pasting several such sheets together. To this wooden stick was attached at each end to roll the book for storage or transport. Though the writing was in columns, it proved tedious to unroll the book every time it was necessary to refer to a particular column, and eventually the length of papyrus was folded instead of being rolled. Well preserved papyri are comparatively rare, as the material was brittle and apt to crumble with age.

• Parchment

Parchment is a writing material made from the inner side of the split skin of sheep. It was probably used as early as the 1500 B.C. Despite its early introduction, parchment did not completely supersede papyrus until the 5th to 6th Centuries. A.D.

Its sheets could not be joined into rolls as sheets of papyrus. Therefore, scribes and librarians developed the practice of folding several sheets of parchment down the middle and sewing them together through the fold. This practice established the form the books have taken ever since.

Vellum

The word parchment has been often used rather loosely to describe both parchment and vellum. Vellum, through in some respects similar, is a finer material than parchment. The skin used is that of the calf and it is not split. It is first washed, cleaned by long exposure in lime and then stretched, paired with a knife, dusted with chalk and rubbed smooth with pumice stone. It can be written or printed upon and can be dyed or stained for book binding purpose. Uterine vellum, prepared from the skin of an unborn calf, was used only for the most expensive manuscripts. Though costly, vellum is still used by calligraphers and in the production of finely printed editions.

The paper is an important and integral component of print media. In early days information is available in non-printed media also. The last two decades of the previous century saw some new media for recording information, in addition to print media. They include microforms, audio, visual, audio visual, optical and digital media. The non-print media is also called as non-book material, could be broadly grouped as Microforms and Audio Visual materials.

4.2 Origin and Development of Print Media

Communication is the fundamental process without which, neither can humans, lead a smooth life nor a society grow. It not only makes the existence of societies possible but also, but its nature, distinguishes between the human and other species (Schramm, 1973).

With the advent and advancement of communication technologies we are now in an 'Information Society'. Although various technologies have emerged and are developing a much faster rate, print media as a significant medium of communication skills remains a very popular mode of communication.

Advent of Paper

Paper gets its name from papyrus and was invented in China in 1056 AD by Ts'ai Lun, who served in the court of Emperor He Di Ts'ai Lun. Later, the Chinese found

the art of good paper- making fibres by pounding rags, hemp rope and old fishing nets into a pulp.

The Chinese art of paper making spread to other parts of the world after several Chinese paper makers were captured by Arabs in what is now Soviet Turkistan. The Arabs urged the paper-makers to continue their art and teach it to the Moors in the city of Samarkand. The paper industry was established in Baghdad in 795 AD. Paper-making spread to Europe as its manufacture was first recorded at Jativa in Spain in 1150 AD. It was introduced in England by John Tate in Hertford. The first paper mill is America was established in Philadelphians in 1690.

The paper is traditionally used for handwritten and print media. Paper as a medium for information storage is used a wide range of other documents – charts, wall charts, poster, flipcharts, hangouts, atlases and folders apart from the conventional document like the books.

Print media is one of the first to be associated with mass communication and has played a significant role in the process of democratization of education an spread of knowledge. The book is the common form of Print Media. It may contain words that are meant to be preserved for the future as well as for the present. Newspapers and magazines constitute other forms of Print Media.

• Paper Size and Paper Finishes

Paper has varieties of qualities and dimensions. For printing of books, newspapers, magazines etc. There are different types of printing which need different sizes and qualities of paper. There are different types of print which need different sizes and qualities of paper. There are two basic categories of paper sizes.

The British Standard sizes are Foolscap, Post, Crown, Demy, Medium, Royal and Imperial.

The international size is A- series, B-Series and C- Series. The paper qualities on the type of finish are Machine finish, Super calendared, Imitation Art Paper, Art Page, Antique paper, Featherweight Antique, Twin Wire Paper, Cartridge paper, Offset Cartridge and Mould-made Paper and so on.

• Paper and Printing: The Proliferation of Print Media

Print media, composed of several media, no doubt is more popular and common than any other media in practice. The Print medium is very powerful medium and is likely to remain as the core-medium of communication in the days to come in spite of the emergence of new technology in printing and information communication. Books as a print-media has effectively used for control and content and found to be very effective in handling historical information.

Categories of papers in Print Media

- Brief Text Media includes Sheets, Folders, Leaflet, and Hand-outs.
- Paper based Visual Media includes Displays, Mobiles, Charts, Flip Charts and Posters.
- Continuous Paper Media includes Books, Journals, Magazines and News Papers etc.
- Machine Readable Lengthy Text includes Punched Tape and Punched Card.

4.3 Print Media

Printed words are messages prepared for the specific audience, Printed media includes Books, Learned Periodicals, Conference Proceedings, Magazines, and Newspapers etc. The function of these media is to provide information, and in certain cases provide entertainment as well. The audience for these media could be specialized one in certain cases, or it could be large and diverse as in the case of newspapers and magazines etc.

Newspaper has a special role in delivering information or news to the citizen. Newspapers are read by the general public. Published on a regular basis usually daily or weekly, they also interpret events behind the news, such as social trends, political developments etc. Apart from this, newspapers also provide useful information such as stock market prices, weather reports etc. They are also a popular source of reading for entertainment. Newspapers are the cheapest and most efficient mass communication media.

Books share with other print media the functions of informing, persuading and entertaining. They differ from the other print media in that they are bound and are made to last.

Since books take a year or more to produce, the information provided in them is not recent or up-to date. However, it explores a topic or idea in depth. Books have a smaller audience than magazines and newspapers, most books usually sell only a few thousand copies. Fiction, Reference books, Textbooks, Research Monographs are some example of different types of books.

Magazines like Newspaper, are a popular kind of reading matter which are issued on regular basis – weekly, fortnightly, monthly etc. Unlike most newspapers, magazines are usually printed on glossy paper with lots of colour photographs, drawing, and other illustrations. A magazine is published less frequently than a newspaper. It is also manufactured in a different format.

Periodicals are specialized journals not meant for mass circulation as is the case with magazines. They deal with specialized subjects and are the primary sources of information usually devoted to reporting or original research. Periodical articles are the main means of communication the exchange of information in different areas of knowledge. Periodicals are therefore, meant for specialised groups of person and server education and research purposes.

There are also different types of print media likes Indexing and Abstracting periodicals, Directories, Conference Proceeding etc. These print media do not communicate information directly but they provide information about where to find information from primary sources like books and periodicals etc.

Advantages of Print Media

- Books, Magazines etc. are portable. It can be carried along and can be used anytime and anywhere.
- The print material is easy to use. They can read full or part at their own time.
- The cost of print media is less compare to the other media.
- Printed material is easy to access at any place at any time with the physical copy.

Disadvantage of Print Media

- The users have knowledge about the language of the printed materials otherwise it is not useful for them. Like language problems.
- Readers are also aware of the knowledge of printed messages and images.
- The printed materials give the theoretical knowledge about the particular subject but it can't give the practical experience.
- The printed materials will be published liked textbooks etc. after that no one can be changed the text materials.

4.4 Electronic Media

Electronic media is considered as the storage, distribution and transmission of information. The term electronic media includes magnetic, optical and magneto optical media. The media that is normally used media that are an integral part of

the Central Processing Unit of a computer systems. e.g. Core Memories, Random Access Memories, Read Only Memories, Bubble Memories.

The important characterises of the information scene today is that large amounts of text, images, and numeric data are now created and distributed in electronic form. Sometimes the electronic form is produced in parallel with a conventional print on paper version, sometimes it is an intermediate stage in the production of print, and sometimes it is the only form in which the information exists. Information in electronic form is of great interest, as it is machine readable, and is searchable by computer software. Editing, sorting, updating data in electronic form can be done fast. Beside these, information in electronic form can be transmitted quickly and reliably to the remote location.

Categories of Electronic Resources.

The electronic resources can also be categorized into three categories namely primary, secondary and tertiary electronic resources. They can be summarized as per below.

1 Primary Electronic Resources.

Primary electronic resources are those in which newly generated information is recorded and disseminated. One of the best examples of primary e-resources is the various types of e-journals available on the net. Because e-journals contain the results of researches going on in various subject fields they are considered as newly generated information. One more example of primary e-resources can be e-reports, which contain information on research and development, which are more useful for R & D institutions.

The main examples of primary Electronic resources are as below.

- Letters
- Diaries
- E-mails
- Websites
- Survey Research
- Annual Reports and Government Reports
- Processing of Meetings and Conferences.
- Photographs
- Journals Articles, News Papers

2 Secondary Electronic Resources.

Secondary electronic resources are those, which facilitate access to information contents of primary e-resources. Uncover, BUBL (Bulletin Board for UK libraries) information services, etc. Are some of the bibliographic services on the net. Generally, secondary e-resources are various types of bibliographic database, full-text databases and electronic abstracts and indexes. Many encyclopaedias and dictionaries are also available online, which are also one type of secondary e-resources.

The main examples of Secondary Resources are as below.

- Textbooks
- Newspapers and Magazines articles
- Bibliographies and Biographical works
- Dictionaries, Encyclopaedias
- Monographs and fictions

3 Tertiary Electronic Resources

Tertiary e-resources are those, which facilities access to the secondary e-resources. If we want to know that how many bibliographies have been made on a particular topic we should have a list of all the bibliographies on that topic, which is known as 'Bibliography of Bibliographies.' This is one type of tertiary e-resources. Subject guides are also one type of tertiary e-resources. Last but no the least, directories also come under tertiary e-resources. A directory is a list of people, companies, institutions, and organizations in alphabetical or classified order, providing contact information and other pertinent details in brief formation.

The Tertiary source examples are given as below.

- Guide books
- Almanacs
- Directories
- Manuals
- Fact books

Criteria for Evaluating Electronic Resources.

The internet is the storehouse of information. The immense number of sources are available on the internet. When a search is executed using the search engine it brings out a bulk of different sources. But as in the case of most printed sources such as magazines, books etc. Which go through the filtering system (editing, peer review)

most information on the internet is unfiltered. So, there arises a need to evaluate the sources before they are used.

- Content Consideration
- Access Consideration
- Technical support considerations
- Cost Considerations
- Legal Considerations
- Selections Tools
- Management of Electronic Resources in Libraries.

Management is the most important thing, which each and every institution has to implement for the smooth running of the organization. The library is also one of the institutions and so management is very important in it. Library has to manage its each and every resource. Electronic resources also come under one of the resources of the library and its management is one of the important issues.

In the process of electronic resources basically, three factors come under consideration, which is explained below.

Selection of Electronic Resources by forming a Collection Development Policy

Today, if the libraries have to cater to the needs of the users, efficiently and effectively, the librarians have to procure electronic, digital materials into current practices and procedures. The leads to the selection criteria for acquiring the electronic resource. While going for electronic resources, one should not just consider the quality and the content of resources.

Unique concerns are addressed the electronic collection development policy, which relates to the electronic resources available on the internet.

The following factors to be considered in the selections.

- a) Justification of the price of electronic resources, in order to be approved for purchase, as it may be greater than its print counterpart. There is a possibility of the requirement of additional hardware/software for internet-based electronic resources.
- b) Other comparable resources in another format should be cancelled, when they cannot provide the same capabilities as internet resources.
- c) Electronic resources should be appropriate for the type of users, it is intended to serve, user friendly, preferred by users and potential usage by remote patrons.

- d) The resources, which are to be selected, should be stable. Issues related to the vendor's stability. They should be reliable, should have a reputed business record, should be committed to his work and should be committed to his work and should provide 24 X 7 access.
- e) The internet resources, which are to be selected, should be made available with their duplicate copies if networking or other alternatives are not possible and also when the library chooses to provide a product on a service in more than one format.
- f) A major consideration for the electronic resources licensing. As licensing gives right to access, copyright issues, access to information from previous releases.

Acquiring Of Electronic Resources.

CD-ROMs, Online databases, and software on diskettes are being used for cataloguing electronic resources in libraries. Before acquiring these resources to the collection some decisions have to be taken regarding the support of hardware and software requirement, usability of infrastructure available, networking capabilities, providing remote access through IP authentication or by login and password, licensing terms and restrictions, number of simultaneous users or unlimited usage and level of access permitted to the users for these resources.

The process of acquiring electronic resources is totally different and more complex from the traditional method of the library for purchasing books and serials in print format. The acquisitions procedure in electronic media involves 'interaction with IT tool, issues of legal affairs like copyright and fair use of resources while sharing, forming to get access to more resources at minimum costs and should have follow-up with publishers to solve technical problems in having access to resources like updating the links which do not work or which have been changed in due course of time.

Processing of Electronic Resources

Proper cataloguing and documentation of electronic resources should be done to ensure complete access and ability to track these items for proper maintenance, as these resources are selected and added into the library collection. Subject experts and users have the responsibility for recommending titles in electronic format. Another most important factor is that the library personnel has to gather some electronic resources in anticipation by foreseeing the user needs. After the acquisition of the

resources either by subscription or by downloading they are to be classified according to their subject content and indexing techniques have to be adopted for easy retrieval. Some electronic resources are delicate to handle such as floppies, CDs and DVDs. A duplicate CD should be used for taking a backup for regular use, so that in case of loss or damage the original can be utilized.

4.5 Difference between Print Resource Media versus Electronic Resource Media

- 1) Print Resource Media is available on library working hours only. Electronic Resource Media is available on 24*7 access.
- 2) In Print Media searching of keyword is not available in to the text. Electronic Resource Media searching can be different options are available.
- 3) In Print Media one users can access any material by himself. Other users have to wait for the returning of the same documents.
 - Electronic Resource Media many users can use same material at same time.
- 4) In Print Media users can access the materials from the library itself. Electronic Resource Media users can access the materials from remote access also.
- 5) In Print Media reproduction is only photocopying method by zerox machine. Electronic Resource Media reproduction is directly taking print out from the source.
- 6) In Print Media the Editing and Deleting etc. is not possible. Electronic Resource Media Editing, Deleting, Marking, sizes, viewing options are available in this.
- 7) In Print Media the Articles may be in the form of hardcopy by taking the zerox copy.
 - Electronic Resource Media particular Article may be download.
- 8) New arrival / published Print Journals are not available on the same day. It will take the Transportation time.
 - New arrival / published Electronic Journals are available on the same day when it published.
- 9) For accessing print Media no need to use the any equipment's.
 - For accessing Electronic Resource Media special equipment will be required like the computer with internet connections.

In Print Media for retrieval consume more time at the library and some time we have to depend upon the library staff and library opening hours.

Electronic Resource Media for retrieval is very easy and fast including the back volumes of the journals.

SECTION - II

PROFILE OF ENGINEERING COLLEGES

THE DETAILS OF COLLEGES COVERED UNDER THE PREVIEW OF THE STUDY.

- 1 A. D. Patel Institute of Technology. ADIT is an ISO 9001-2015 certified institute running course of Engineering at Vallbh Vidyanagar, Anand. Gujarat.
- 2 Adani Institute of Infrastructure Engineering (AIIE) is at Ahmedabad and running course of Bachelor of Engineering in Branch of Computer Engineering, Electrical Engineering, Information and Communication Technology.
- 3 Aditya Silver Oak Institute of Technology is situated as Ahmedabad and running course of Computer Engineering, Electrical Engineering, Civil Engineering, Mechanical Engineering and Aeronautical Engineering.
- 4 Ahmedabad Institute of Technology was established in the year 2004. This college is running by the charitable trust namely Ashok Education Landmark Trust and it is situated at Ahmedabad city, offering the engineering courses.
- 5 Apollo Institute of Engineering & Technology is one of the premier institute for imparting quality technical education is situated at Enasan, Ahmedabad.

The library has the collection of 25021 volumes, International Journal, National Journals, Technical Magazine, News Paper, CD, and Project Paper of students.

- 6 Apollo Institute of Engineering and Technology (SF) is located at the Ahmedabad city, Gujarat and affiliated to Gujarat Technological University Ahmedabad.
- 7 Veerayatan Institute of Engineering is situated at Kutch, Gujarat and affiliated to Gujarat Technological University. This institute was established in the year 2010. This institute is offering the 50% discount to the poor and needy students.
- 8 Babaria Institute of Technology is situated at Varnama near Vadodara was established in the year 2004. This institute has received the many awards from the different government body.

- 9 Bhagwan Mahavir College of Engineering and Technology is situated in Surat city of Gujarat (BMCET) established in 2008. BMCET offers Bachelor of Engineering programme in the field of Computer, Mechanical, Civil, Automobile, Electronic, Electronic and Communication Technology.
- 10 Birla Vishvakarma Mahavidyalaya Engineering College- GIA is grant aided engineering institution located at Vallabh Vidyanagar, Gujarat. It is founded in 1948. It is the one of the oldest engineering colleges in India and first degree college in the state of Gujarat state. This institute was managed by Charutar Vidya Mandal.
- 11 Birla Vishvakarma Mahavidyalaya Engineering College- SF is self-financed engineering institution located at Vallabh Vidyanagar, Gujarat. This institute was managed by Charutar Vidya Mandal.
- 12 C.K.Pithawala College of Engineering and Technology is a self-financed institute which started its functioning in December, 1998 affiliated first with V.N.S.G.U Surat and now affiliated with G.T.U, Ahmedabad. It is situated in Surat. This institute work under the Navyug Vidyabhavan Trust.
- 13 Chandubhai S Patel Institute of Technology Changa. It is located at the Petlad Anand, Gujarat. This institute was established in 1994. The library has infrastructure of 25 computers to access the e-resources namely IEEE, ASME, AIP, IPS, IOP, SCPIT database containing e-books, journals, CD, Project Report, Syllabus.
- 14 Charotar University, Changa has been conserved by Shri. Charotar Modi Sattavis Patidar Kelavani Mandal Trust offering the many course in this university and also providing the engineering courses.
- 15 Chhotubhai Gopalbhai Patel Institute of Technology (CGPIT) is under the roof of Uka Tarsadia University in the year 2009 with the view of educating and training future professionals to lead in today's competitive environment and to me the need of globalization and industrialism by providing the dynamic and conductive learning environment.
- 16 Darshan Institute of Engineering & Technology is a leading institute offering programmes in engineering. This institute is locating at Rajkot, Gujarat and established in the year 2009 by Shri. G.N.Patel Education and Charitable Trust.

The collection of this library is 24500 books, 100 Magazine, 1500 hard bound journals, 14000 e-journals, 80000 e-books, 1650 DVD, 570 hard bound Journal and 650 e-magazine etc.

- 17 Dr. Subhash Technical Campus is located at Junagadh, Gujarat. This institute was founded in the year 2010 by Late Shri. Pethaljibhai N. Chavda. The library has subscribed over 100 national and international Journal. The collection of books is more than one lacks books.
- 18 Engineering College of Tuwa, was established in year 2009 by Panchmahal Jilla Shikshan Pracharak Mandal, Morva (Rena). Institute in the first self-financed engineering college established at the one of the backward districts of the state. At present institutes offer graduate programs in almost all major branches like Mechanical, Civil, Computer, Electrical and Electronics & Communication Engineering.
- 19 G.H.Patel Of Engineering College is situated at Vallabh Vidyanagar, Anand, Gujarat. This college offers the branches of Mechanical, Computer, and Electrical, Civil etc.
- 20 GIDC Degree Engineering College at village Abrama, Taluka Jalapore, Dist. Navsari which is the pattern of Self Finance Institutions. This institution was established in the year 2010.

The collection of Books is 7294, 19 National Journal, 10 International Journal, 26 Periodical and DELNET AND JGATE is subscribed by the institute library.

- 21 Government Engineering College Valsad was established in the year 2004. The institute aims at producing good professionals as well as worth citizens of a great country.
- 22 Government Engineering College Bharuch was established in the year 2004 in the Bharuch city, Gujarat. Near Bharuch city the industrial area like Dahej and Ankleshwar is the industrial zone.so, many industries are around the Bharuch city.

The collection of library books in different discipline is around 15000 Books, 10 National Journals subscribed by this institutions.

23 Government Engineering College, Bhavnagar was established in the year 2004. The institute is having huge newly constructed buildings and separate blocks for E.C Department, Mechanical and Production, Library Building, Amenity Building, Works Shop and Administrative Building. Government engineering

college, Bhavnagar has always been active in improving the library facility. It offers its services to about 1000 students of different branches of engineering and faculty and staff from various departments of the institute and neighbouring institution. The institute is spread over 43400 meter square of land area with 14300 square meters of land having huge newly constructed buildings and separate blocks for Electronics and Communication Department, Mechanical and Production Department, Library Building, Amenity Building, Works Shop and Administrative Building. This campus blends beautifully with the green landscaping, aesthetic elegance of sculpture and vibrant pursuit of knowledge by enthusiastic and well qualified young and experienced faculties.

- 24 Government Engineering College Dahod was established in the year 2004. GEC Dahod started 60 students of Civil, Mechanical, Electrical and Electronics and Communication department. GEC dahod is providing the hostel facilities for Boys and Girls.
- 25 Government Engineering College, Godhra is established in the year 200-2010 in Panchmahal District. At Present only Mechanical, Electrical, Civil and Electronic & Communications Engineering courses are running. The collection of Library books is around 9000 volumes.
- 26 Government Engineering College, Palanpur campus having four block with similar architectural design of the building of Civil Engineering, Electrical Engineering, Mechanical Engineering and Mining Engineering Department building.

The library has collection of 3000 books of various disciplines. Total 9 journals are subscribed by the library.

- 27 Government Engineering College, Patan was established in April 2004 with three branches Computer Engineering, Electronic Communication and Mechanical Engineering. In the year 2008 it was shifted Katpur on Chanasma Patan Road, in this new building the two more branches were added namely Electrical and Civil Engineering.
- 28 Government Engineering College, Rajkot was established in the year 2004. The college is affiliated to the Gujarat Technological University and recognized by All India Council for Technical Education, New Delhi.

- 29 Government Engineering College. Gandhiagar was established in 2004 and located at capital city of Gujarat.
- 30 Government Engineering College, Surat, earlier this college was known as Dr. S & S.S. Ghandhy Government Engineering College. The Establishment year is July 2004.
- 31 Government Engineering College, Modasa was established in 1984 under the Directorate of Technical Education, Gujarat State. The institute was affiliated with Hemchandracharaya North Gujarat University, Patan from 1984 to 2007. From 2008 the institute is affiliated with the GTU-Ahmedabad.
- 32 Grow More Foundation Group of Institutions, was located at Himatnagar, Gujarat. The collection Library books is 9307, 9 Journals and 27 Magazine subscribed by the library.
- 33 Gujarat Institute of Technical Studies was established by Radha Mohan Education Charitable Trust in June 2009. The location of the institute was Village Moyad, Nr. Ahmedabad- Himatnagar NH no 8 Dist, Sabarkanta.
- 34 Gujarat Power Engineering and Research Institute (GPERI) was run under PPP mode, This institution was established in 2011. The location of this institution was village Mewad, Dist. Mehasana, Gujarat. The collection of library is over 7000, 32 Journals and Magazines and 85000 E-books collections.
- 35 Lalbhai Dalpatabhai College Of Engineering, Ahmedabad is premier institute and affiliated to Gujarat Technological University. This institute is established in the year June 1948. The collection of library book is 89573 volumes, 6925 bound journals, 54 print journals and online journals of 480.
- 36 Maduben and Bhanubhai Patel Women Institute of Engineering and Research in Computer and Communication Technology is first engineering college exclusive for girls across Gujarat. Total 12005 collections of library books, 73 current periodicals and it can be search by the library OPAC systems.
- 37 Marwadi Education is located at Rajkot. The collection of Library books 25000+ collection. This books can be searched by the OPAC. They have subscribed the national and international journal for all the discipline.
- 38 Pandit Deendayal Petroleum University is located in Gandhinagar, capital of the Gujarat. PDPU has been established by GERMI as a private university through the state act enacted on 4th April, 2007.

- 39 R K University is situated at Bhavnagar Highway, Rajkot. R K University offering a number of courses at their premises.
- 40 S.N. Patel Institute of Technology & Research Centre offering engineering courses it is located near Sola-Kalol Road, it is near Gandhinagar city.
- 41 Sabar Institute of Technology for Girls, It is located at Ahmedabad Himatnagar high way and provides educations for only Girls students.
- 42 Sal Engineering & Technical Institute was formally inaugurated in August 2014 by Shri. Bhupendra Chudasama, Education Minister of Gujarat.
- 43 SAL College of Engineering is an academic entity covered under the umbrella of SAL Technical Campus. It is established in the year 2012. SAL is having the infrastructure which consists of huge library.
- 44 SAL Institute of Technology & Engineering Research a constituent of SAL is the Self-Financed institute of Engineering approved by AICTE. It was set off from the academic year 2009-2010.
- 45 Sardar Vallabhbhai National Institute of Technology, Surat was established in the year 1961. The Central Library was established in the year 1968. It has built a large collection of books, journals and non-book materials. It also has a rich collection of the electronic resources.
- 46 Sarvajanik Engineering College (SCET) is located at Surat. It has big infrastructure of building as well Library buildings.
- 47 Shakarsingh Vaghela Bapu Insitute of Technology (SVBIT) was established in the year 2009. The institute is located at Gandhinagar Mansa road. The library has the collection over 15000 books and 50 national and international journals.
- 48 Shantilal Shah Engineering College was started in the year 1983-84. The location of the institute was at Post Vartej, Dist. Bhavnagar. The library has about 19088 technical books and reference books, encyclopaedias and Indian Standards. The library is also providing the book bank facilities to the students.
- 49 Shree Swaminarayan Institute of Technology (SSIT) is worked under the Shree Satsang Shiksh Parishad (established in the year 1971). The college is located near the Gandhinagar
- 50 Shri Labhubhai Trivedi Institute of Engineering and Technology is managed by Mahatma Gandhi Charitable Trust. The institute was established in the year 2009.

- The library is set up during the year 2010 and it has enriched collections of the library resources.
- 51 Shree S'ad Vidya Mandal trust established in the year 1954 from the blessing of Shri. Swami Shri. Atulanandi. It is established in the year August 1996. The location of the institute is near Bharuch city. The Library has the collection of Books 28512 volumes, 66 Periodicals, Reference books 1205, Indian Standards 536, CD/DVD 2016, E-books 1700, E-Journals 2279 and Technical Report 154.
- 52 Shree Swami Atmanad Saraswati Institute of Technology was established in May 2009 and it is managed by Shree Tapi Brahmcharyahram Sabha Trust. The library is well equipped with Books of all discipline. The collection 10001 volumes of books, National/ International Journal and Magazine are being subscribed in the library and also 79 technical e-journals and e-books collections.
- 53 Shroff S R Institute of Chemical Technology College was established in the year 2010 near Ankleshwar –Valia Road, Bharuch. This institute offering the Mechanical, Chemical, Electrical and Electronic Engineering courses were provided.
- 54 Sigma Engineering College, Matar was established in the year 2011 near Village Karjan, Vadodara and running course of Engineering courses.
- 55 Sigma Institute of Engineering was established in the year 2008 and offers BE programmes in IT, Electronics and Communication, Mechanical, Electrical, Computer, and Civil Engineering.
- 56 Smt. S.R.Patel Engineering College The institute Smt. S. R. Patel Engineering College was established in the year 2009 at Dabhi, about 4 km away from Unjha and about 28 km away from Mehsana. The institute is promoted by Smt. Sushilaben Rameshbhai Patel Charitable Trust and supported by Ajay Engi-Infrastructure Pvt. Ltd., Mehsana. The lush green campus is spread over in a 12 acre area. The beautiful landscaping, gardens and peaceful environment provide a true feeling of closeness to nature.
- 57 The Maharaja Sayajirao University of Baroda. The Faculty of Technology and Engineering as it stands today formed along with the establishment of The Maharaja Sayajirao University of Baroda in 1949 is an outgrowth of what was popularly known as the "Kala Bhavan Technical Institute" (KBTI) established in June 1890 by his late Highness The Maharaja Sayajirao Gaekwad III of Baroda

- state. In May 1990, it completed 100 years of glorious services for the cause of Technical Education.
- 58 Universal College of Engineering & Technology was founded in the year 2008. This college was running by the Global Foundation Trust. This institute is located at Village. Kalol, Gandhinagar.
- 59 Valia Institute of Technology is a premier institute situated in village Valia ,Bharuch and was established in the year 2002 and running the different branches of engineering courses and approved by the A.I.C.T.E
- 60 Venus International College of Technology was located at Kalol High way, near Gandhinagar. The library has the collection of 7964 books of volume. The library has automation software of SOUL 20.
- 61 Vishwakarma Government Engineering College was located in the Ahmedabad city and was established in 1994, for providing the Engineering and Technology field. This institute in the Gujarat Technological University campus. The collection of the books was 26110 volume of the different branch and subscribed the many print and electronic journals.
- 62 Vyavasayi Vidya Pratishthans Sanch College was established by Rajkot Nagraik Sahakari Bank Ltd. to promote quality education in technical field. This institute was found in the year1996. The VVP library has reach collection of Books, Journals, and Reference books, Technical, non-technical Journals and Magazine etc.

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