4.1. Introduction:

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. The Advanced Learner’s Dictionary of Current English lays down the meaning of research as “a careful investigation or inquiry especially through search for new facts in any branch of knowledge.” Redman and Mory define research as a “systematized effort to gain new knowledge.” Some people consider research as a movement, a movement from the known to the unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full and fuller understanding of the unknown. This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

Research is an academic activity and as such term should be used in a technical sense. According to Clifford Woody researches comprise defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organising and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis. D. Slesinger and M. Stephenson in the Encyclopedia of Social Sciences defines research as “the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art.” Research is, thus an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning generalization and the formulation of a theory is also research. As such the term ‘research’ refers to the systematic method consisting of enunciating the problem, formulating a
hypothesis, collecting the facts or data, analyzing the facts or data, analyzing the facts
and reaching certain conclusions either in the form of solutions towards the concerned
problem or in certain generalizations for some theoretical formulation.

4.2. Definitions of Research:

Generally the world research is composed of two syllables “re and serach”
which to search again carefully or re-examine the facts. Research is innovation and
updates knowledge. Research is an investigation undertaken in order to discover new
facts. Research is the activity of solving problem which adds new knowledge. So
research means ascientific investigation of any field, a serach for facts, answers and
solution of any problems.

Konnur’s library science dictionary, “study and investigation in some field
to discover something new or new relationship to get additional information.” ²

According to Theodorson and Theodorson (1969:347), “It is a systematic
and objective attempt to study a problem for the purpose of deriving general
principles”. Robert Burns (2000:3) describe it as a systematic investigation to find
solutions to a problem.” ³

The Webster’s international dictionary proposes a very inclusive definition
of research as, “a careful critical enquiry or examination in seeking facts or principles;
diligent investigation in order to ascertain something.”

According to John W. Best research may be defined as, “the systematic and
objective analysis and recording of control observation that may lead to the
development of generalization, principles, or theories, resulting in predications and
possibly ultimate control of events.”

“According to Rickman, methodology is defined as “the study of methods by
which gain knowledge. It deals with the cognitive processes imposed on research by
the problem arising from the nature of its subject matters.”

According to Abraham Kaplan, research methodology is “the description,
explanation and justification of various methods of conducting research.” ⁴
4.3 Title of the Research:

“Management of Periodicals in College libraries affiliated to Swami Ramanand Teerth Marathwada University, Nanded: A Study”

4.4 Statement of the Problem and Need of the Study:

The main goal of the library is to provide current & current information. Books are important but current information is available in the periodicals. Latest information is published in periodicals so periodicals play an important role in dissemination of information in the library. The NAAC has given more weightage for available of print journal & e-journals in the library.

The main focus was to study the section of periodicals maintained in the college library. This section is important and maximum available current information need for the college libraries. But so many library administrations & higher authorities have neglected the prime importance of periodicals and also weak in number of title, and those are not preserved properly. Some college libraries’ condition are very bad like without separate periodical section, very less of library staff and minimum expenditure spend on journals and e-journals.

Without management of library, there can’t be proper work in it, especially in the section of periodicals. Researchers point of view about granted college libraries are the best service providers for readers. But some barriers occur that reader can’t receive traditional to current information from college library, specially related to section of periodicals. Hence the researcher felt the need to study the ‘Management of Periodicals in College libraries affiliated to Swami Ramanand Teerth Marathwada University, Nanded’: A Study.

4.5 Research Design:

A Research design is a plan of action to be carried out in connection with a research project. It is the conceptual structure within which research is conducted and it constitutes the blue print for the collection, measurement and analysis of data. It is the specification of methods and procedures for acquiring the information needed for solving the problem. Decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study constitute a research design.
4.6 Aims & Objectives of the study:-

The allied objectives of the present research were as following:

1) To overview the present situation of the college libraries, affiliated to S.R.T.M.U.Nanded with special reference to periodicals.
2) To investigate the provision of human resource management.
3) To determine the budgetary provision, especially for the periodicals.
4) To analyze the stage of computerization & its services.
5) To evaluate the stock, growth & development about general periodicals to e-Journals.
6) To find out the use & effectiveness of the periodical section.

4.7 Scope and Limitation:

The present study covers all 104 granted senior college libraries affiliated to Swami Ramanand Teerth Marathwad University, Nanded including academic and aided professional colleges i.e Academic (Arts, Commerce and Science) were 96 and Professional (B.Ed., Law & Engineering etc.) were 08. Both are the granted & affiliated to this university. It has wider scope of total 389 affiliated colleges but considering limitation of time and other factors present study was confined to the only 104 granted colleges, especially researcher has focused on management of periodicals in granted college libraries & undertaken study of ten years i.e 2003 to 2013. However non-granted colleges are excluding in this study.

4.8 Significance:

1) The research will try to focus on improving the importance of periodical section.
2) This research will encourage the librarians for efforts to increase the strength of traditional journals to e-journals in the college libraries.
3) The study also helps & suggests other researchers for future study about Universities & Information centers regarding the total management of Periodicals in the library.

4.9 Method of Data Collection:

Methodology in research is way to solve the problem to unfold the probable answer and to test the hypothesis stated. As there are many roads leading to city.
Likewise there are many methods to solve the problem of research. The researcher has to select one of them which is appropriate and requires minimum efforts, time, energy and money.

A research methodology involves the study on the method or research and is called as a kind of research method.

“Types of research method:

1) Historical research method
2) Descriptive research method
3) Case study approach
4) Survey method
5) Comparative method
6) Experimental method.”

I) Descriptive research method:

“This type of research describes social situations, social events, social systems, social structures, etc. The researcher observes/studies and then describes what he has found? Take for example, the research on drug abuse. The ministry of social welfare, Govt. of India assigned this study in 1976, 1986, and 1996 to teams of scholars. Since collecting data on scientific basis for descriptive studies is careful and deliberate, scientific descriptions are typically more accurate and precise than casual ones. Another example of descriptive study is the census in India.”

There is maximum use of this methodology in the social science. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening.

“Descriptive research describes and interprets “What is.” It is concerned with conditions or relationships that exist; practices that prevail; beliefs, point of view, or attitudes that are held; processes that are going on; effects that are being felt; or trends that are developing. Its major purpose is to tell “what is”.

A descriptive research is carried out with specific objective and hence it results in definite conclusions. This research tries to describe the characteristics of the respondents in relation to a particular product or a practice of importance. The research can design a suitable questionnaire to capture data from the respondents and
come out with conclusion after data analysis. The kinds of conclusion which are derived in such studies are descriptive in nature. There are several sub-categories of descriptive research:

1) Case studies
2) Surveys
3) Developmental studies
4) Follow-up studies
5) Documentary analysis
6) Trend studies
7) Co-relative studies.” 7

“Descriptive research is a recent development in the field of investigations. It seeks to describe a field or a problem by using questionnaires and opinion. The approach is mostly directed towards identifying the various characteristics of the research problem and to create observation conducive to further research. Mostly empirical problems are investigated by this approach.

The piece of research work may well depend on a well-founded hypothesis. The domain of investigation is properly specified and researcher has to canvass his questionnaire within that domain. Researcher must prepare his questionnaire or opinion in such a way that it does not injure the feeling or sentiments of respondents.

The important advantage of this approach is that it brings the researcher and the respondent fact to face and their cooperative efforts help to build up a better, research study. The limitations of this approach are, it involves considerable time and effort to complete the investigation. Many a times field investigation take too long to be completed and the data become useless by the time these are analyzed and interpreted. Such investigation, therefore, do not lead to any improvement or advancement in knowledge.” 8

This method is also known as a qualitative research method. Case study method also part of this method. This method used in some subject & literature especially history, management, library science etc. This method also used study for comparative. In the library science so many examples are like collection development in any types of library, Use of library collections & ICT. Reading habits of the renders, human resource management, and Critical study of distribution of finance for
the library etc. This study the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

The main purpose of the present study was to study the periodical section of college libraries under Swami Ramanand Teerth Mrathwada, University, Nanded. The information regarding the sources of data, sampling procedure, tools for collection of data, construction, and description of the questionnaire and data analysis given as following:

4.9.1 Sources of Data:

Required data for the present study was collected from the college libraries affiliated to Swami Ramanand Teerth Mrathwada, University, Nanded. The study was mainly based on the data collected from the librarians of college Libraries through a well designed questionnaire. In this process of collecting the data, survey method was adopted and questionnaire technique was use to cover the gaps in the questionnaire and to clear doubts. Besides, the secondary data was collected from sources like text books, reference books, national and international journals, magazines and online journals.

4.9.2 Sampling Procedure:

College libraries affiliated to Swami Ramanand Teerth Mrathwada University, Nanded, college librarians, who were involved in Administrative and providing library services. All the granted 104 College Libraries was taken into consideration for the present study.

For the selection of College Libraries of Swami Ramanand Teerth Mrathwada University, Nanded, the researcher distributed questionnaire to all the college librarians. A total Number of 104 granted affiliated Colleges out of which 91 colleges affiliated of Swami Ramanand Teerth Mrathwada University, Nanded, were selected for the present study.

4.9.3 Instruments:

A standard structured questionnaire was designed to collect the required information. The measure consists of five parts related to periodical section of college library were information about the college, general information of the college library
regarding staff, building & sections, Budget (Financial management), status of periodical section and personal comments of the librarian.

4.9.4 Data Collection Procedure:

The researcher used survey method to collect the data from the college libraries affiliated to Swami Ramanand Teerth Mrathwada University, Nanded, The structured questionnaire was framed and personally administered to the Librarians of affiliated colleges of S.R.T.M.U., Nanded, 91 questionnaires were obtained out of 104 college librarians and 13 questionnaire were rejected because of omission and incomplete information. The survey yielded 87.5 % response rate with 91 usable responses.

4.9.5 Tools for the Collection of Data:

Information collection is more important in systematic research process. It depends on subject and related hypothesis through research methodology with useful and powerful tools for data collection may be possible accurately analyze. Shortly the complete knowledge of research process is after selection, distribution, collection, analyses and description then presentation for solution of the problems. There are number of tools to acquire data for research work.

“While deciding about the method of data collection to be used for the study, the researcher has kept in mind two types of data viz. primary and secondary. The primary data are those which are collected a fresh and for the first time and thus happen to be original in character. The secondary data on the other hand are those which have already been collected by someone else and which have already been passed through the statistical process. The researcher would have to decide which sort of data he has to use for his study and accordingly he will have to select one or the other method of data collection.”

The problem of research is not solved unless a proper tool is selected and use for data collection. Data required to clarify all the ideas in the mind of researcher was collected by the researcher properly. There are various tools available and described by previous researchers which can be used. To have a brief idea of this tools, it can be summed up through figure 4.1 which is graphic presentation given by Wilkinson and Bhandarkar.
Out of the sources of data collection shown in the figure, the paper sources constitute a major part of Library collection. They are used by majority of social researchers. Such documents not only describe contemporary events but also help to know these events occurred. As these documents provide the data either first-hand (i.e., primary sources) or second-hand (i.e., secondary sources), it is not necessary for a researcher to spend time, energy and efforts to collect such a large available data through people sources. In the present survey, the researcher has used statistical records available with Swami Ramanand Teerth Mrathwada University, Nanded, A part from these text books, reference books, national and international journals and magazines were used.

The people resources mentioned above, the researcher has decided to use a questionnaire as a tool of research for data collection. The reason for this that it was difficult to visit each Colleges, libraries and collect data required due to vast distribution of the respondents in affiliated to Swami Ramanand Teerth Mrathwada
University, Nanded, Questionnaire tool was used for collection of data pertaining to the present study:

4.10  Construction of Questionnaire for College Libraries:

4.10.1 Questionnaire:

To collect the information about the management of periodicals in College Libraries under Swami Ramanand Teerth Mrathwada University, Nanded, the investigator used a questionnaire.

At the outset a preliminary questionnaire was developed. The outline was discussed with the researcher’s guide, College librarians, university librarians and subject experts of Swami Ramanand Teerth Mrathwada University, Nanded. After discussion the questionnaire was developed and given a trial run among the College Librarians. At last questionnaires were circulated to all the college libraries affiliated to S.R.T.M.U., Nanded.

4.10.1.1 Follow Up:

The final questionnaire (Appendix–I) was sent to all the College Libraries under Swami Ramanand Teerth Mrathwada University, Nanded, along with a request letter and a self addressed stamped envelope. The college librarians from whom the questionnaires were not received within one month were given reminders and they were perused for sending their responses.

The college librarians within the reach of researcher were visited personally and distributed questionnaire to respective respondents and passed on necessary instructions related to the filling up of a questionnaire. The present scholar assured that the information given by them would be used for the research purpose only. Thus researcher could finally gather 91 duly filled by the college librarians as per instruction.

The present researcher then scrutinized each and every forms filled in by the college librarians respectively. Researcher found that the college librarian, a few fields were not filled in the questionnaire, so the researcher dropped 13 forms of respondents before applying further statistical techniques.

In this way, the present researcher collected data for tabulation and statistically analysis of 91 college libraries out of 104.
4.10.2 Personal Interview:

To have a face to face dialogue and to collect more reliable data, personal interviews were arranged with pre-intimation to the interviews. The interviews were conducted according to an interview schedule. While selecting the interviews, experience college librarians were involved. At the first stage their appointment was taken and then only respondents were approached at the appointed time for the interview. After completing preliminary formalities through informal talk, one after another the questions were asked and the responses given by the respondents were noted down in a format.

4.10.3 Personal Observation:

To study the periodical section of college libraries affiliated Swami Ramanand Teerth Mrathwada University, Nanded, the researcher had a personal observation in respected Colleges. The researcher visited college libraries of Shri shivaji college, Parbhani, Dnyanopasak mahavidyalaya, Parbhani, Nutan mahavidyalaya, Selu, Dayanand Arts college, Latur, Rajarshi shahu mahavidyalaya, Latur, Adarsh Education society’s Arts, Commerce & Arts college, Hingoli, Nagnath Arts, Commerce & Science college, Aundha Nagnath, Lal Bhadur Shastri Mahavidyalaya, Dharmabad, Narayanrao Chavan Law college, Nanded, Netaji Subhashchandra Bose college, Nanded, etc. The study was focused on the space of library, library collections, all sections especially periodical sections & its services and availability of traditional to electronic sources.

4.11 Description of the Questionnaire:

The questionnaire is essentially a skilful translation of objective into a set of questions intended to be answered in writing. It is a written list of questions requiring answers in writing.

The questionnaire used in the present survey was divided into five parts, having 125 main questions with multiple options. These five parts were:

A. General information about the College
B. Information about the College Library
C. Budget (Financial Management)
D. Information about periodical section
E. Personal comments/opinion
The first part A of the questionnaire contains information regarding to the college having nine general questions like name of the college, Establishment, nature and affiliation.

The second part B contained eight questions related to the status of library i.e. separate building, number of readers, area, staffing pattern, vacancy and library committee etc.

The third part C was about the budget (Financial Management) required for the growth and development of the college Library. This part has six questions with sub questions. From this the researcher could find out different sources of funds and grants received by the college library.

The fourth part D included questions regarding the Periodical section including sixteen sub parts in capital i.e. section and staff, computer relevance, selection of periodicals (including e-journals), Acquisition and subscription, Processing, circulation and display, Preservation, collection of periodicals, Use of periodicals having two parts A and B in which A) Journals and B) part consist of e-Journals. First part regarding to the Journals include seven main questions with two sub questions and next part i.e. e-journals included sixteen main questions with two sub questions for the depth of collection of information.

Next part was binding consisting 3 main questions with one sub questions focusing on types of binding, preservation of newspaper etc. Followed by Furniture related five main questions about the recommendation in Library Committee for purchasing furniture, deciding policy and maintain book register also include available no. of furniture item.

The twelfth part regarding to Periodicals section was facility having four questions including the required information about equipment etc. Types of Services provided in the college library were asked three questions in thirteenth part of Periodical section including computerized services, maintaining separate record register etc.

Fourteenth part was devoted to Periodicals security and controlling having six questions related to separate policy for data security, new technology for collection of periodicals, security systems etc.
Fifteenth part was Stock verification including two questions of frequency, physical stock verification and adopted method. Last part i.e. sixteenth part was regarding to Weeding out policy having six questions regarding to weeding policy, authority, reuse, and question method etc.

E part contained Personal comments and opinions include five questions for the librarians and question is related to effect of periodical section after NAAC accreditation, adopted modern management techniques and future plan for improving periodical section.

In short, through the questionnaire, care was taken to cover almost all areas of Management of Periodical section including staff, selection, acquisition, processing, circulation, Preservation, use of periodicals, status and adopted policies in college libraries.

4.12 Data Analysis:

The data collected through the questionnaire was analyzed with the help of the computer. The development of electronic devices, specially the computers, has given added impetus to this activity. Computer is certainly one of the most versatile and ingenious development of the modern technological age. The final questionnaire design a coding frame has been developed using Microsoft Excel for each variable. Before analysis, returned questionnaires have been sight-edit for missing data. Quantitative data have been analyzed using descriptive statistics from the statistical package for social sciences (SPSS). Three sets of frequencies have been analyzed.

- Frequency of response to individual questions
- Frequency of multiple responses
- Frequency of responses from individual disciplines
- Results have been presented using figures and tables generated by the excel software. The responses to the open questions have been transcribed using Microsoft word. They have been then arranged according to discipline and have been grouped according to occurrence of words or ideas.

4.12.1 Statistics used for Analysis of Data:

The statistical analysis of the data for the present study was done by applying 1) Simple percentage and 2) Chi-square Test.
4.12.1.1 Chi-square Test:

The Chi-square test is an important test amongst the several tests of significance developed by statisticians. The Chi-square test was used to compare an observed group of frequencies with an expected group of frequencies. This led to deduce the expected frequencies from the null hypothesis. The level of significance was set at 0.05. The statistical analysis of the data of the present study was done by statistical package.

Chi-square, symbolically written as $X^2$ is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance.

**Steps involved in applying chi-square ($X^2$) test:**

i) First of all calculated the expected frequencies on the basis of given hypothesis or on the basis of null hypothesis. Usually in case of 2 x 2 or any contingency table, the expected frequency for any given cell is worked out as under:

$$\text{Expected frequency of any cell} = \left( \frac{\text{Row total for the row of that cell}}{\text{Grand total}} \right) \times \left( \frac{\text{Column total for the Column of that cell}}{\text{Row total for the row of that cell}} \right)$$

ii) Obtained the difference between observed and expected frequencies and found out the squares of such differences i.e. calculated $(F_o - F_e)^2$

iii) Divided the quantity $(F_o - F_e)^2$ obtained as stated above by the corresponding expected frequency to get $(F_o - F_e)^2 / F_e$ and this was done for all the cells frequencies or the group frequencies.

iv) Found the summation of $(F_o - F_e)^2 / F_e$ values or what we call. This is the required $X^2$ Value

$$X^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

$F_o$ = Observed frequency

$F_e$ = Expected frequency-

$df = (r-1) \times (c-1)$ or $df = (r-1)$

$df$ = Degree of freedom.
'r' = number of rows

'c' = number of columns

It is essential for a scientific study to process data and analyse them in accordance with the method laid down for the purpose in order to arrive at the possible results. Data obtained through the questionnaire was analysed and interpreted.

The steps followed by the researcher for data analysis are given below:

1. After analysis, data was framed in the tabulation form.
2. Calculated percentages.
3. Chi-square test was used to compare an observed group of frequencies with an expected group of frequencies. This led to deduce the expected frequencies from the null hypothesis.
4. The analyzed data was used for the conclusion of the present study.

4.13 Research Hypothesis:

Researcher proposed the following hypotheses formulated of the present research work:

1) College libraries have separate periodical sections.
2) All colleges are fulfilling required human resources in the library.
3) There is separate & satisfactory budgetary provision for periodical section.
4) Overall college libraries are fully computerized to provide library services.
5) Most of the libraries subscribe local to International print journals & e-journals.
6) Maximum libraries adopted new management techniques for effective use of periodicals.

4.14 Outline of the Thesis:

The thesis consist of six chapters including Introduction, Review of Literature, Management of periodicals in college Libraries, Research Methodology, Descriptive Analysis and Interpretation of data, Summary, Findings & Conclusion followed by Bibliography.
Chapter I. Introduction:

The first chapter presents a brief introduction to the subject which is selected for research study. An introductory chapter in the beginning includes the basic concept and describes the title step by step like S.R.T.M. University Nanded, Higher education, College Library, History of periodicals in briefly. It further mentions the definition of library management and periodicals also define e-journal.

Chapter II. Review of related literature:

This is important chapter for research. Which is selected researcher carefully mentioned how the knowledge build up to routed topic, the chapter is covered traditional journals to online e-journals. The review of earlier studies are rare, but researcher searched maximum sources to collect the related information like related books, journals, Thesis, Proceeding, reference books, dictionary, related websites through internet and important searched online journals about related research topic.

Chapter III. Management of Periodicals in college libraries:

This chapter has descriptive information about management of periodicals. This theoretically chapter is main chapter about the research problem. Beginning of the chapter describes details to the college library, Management of periodicals, its history and mention the selection to write-off process about periodicals. E-journals are also advance periodicals and that point is included separately. So this is special feature of the study.

Chapter IV: Research methodology & Tools:

This chapter includes brief information of research methodology and discusses the selected descriptive research method. This chapter includes selected tool of questionnaire for data collections, mentioned definition, types and importance. Lastly the structure of questions for questionnaire include with statistically information related to the topic. In this chapter included aims and objectives of the study, research hypothesis, statement of the problem, Scope and limitations and also to make clear mention the need for the study. Selected descriptive methods and questionnaire are the important tools for data collections include shortly in this chapter.
Chapter V. Descriptive analysis and interpretation of data:

Collected data through questionnaire were analyzed with interpretation. Maximum question are included related to the section of periodicals for exact conclusion. The researcher covered & includes topic related questions. The researcher also created various statistical tools such as tables; pi-chart is included while doing statistical analysis.

Chapter VI- Summary, Findings, Conclusion and Suggestions:

Sixth chapter provides the presentation of the summary, findings, conclusions and suggestions arising from the research, as well as highlighting implications for further research followed by the bibliography and Appendices.

The further research study may be possible comparative study of college to college libraries, also university libraries in the state and national level with depth. Lastly include followed by bibliography.

4.15 Referencing Style used in the Thesis:

In doing research, the acknowledgement of scholarly works and ideas by other people is achieved by referencing and citing. In the beginning of the research, it is important “to find out which referencing style or citation format is used by acceptance. The Harvard citation style, the Publication Manual of the American Psychological Association, and the MLA style handbook are widely used” (Wilkinson 2000). The significance of this is the fact that “in a doctoral thesis, appropriate citation and critique signals the espousal of the appropriate values, etiquette, style and cultural savvy” (Parry, 1998).

The American Psychological Association (6th Ed.) reference style uses the Author-Date format. In the field of research, many authors are more familiar with the author and date system. Hence the APA citation style has been used to cite the authors work.
References:


5) Kumar, PSG (2004). Research methods and statistical techniques, New Delhi: B.R. publishing co. 43-48

6) Ahuja, Ram (2009). Op cit. 36


9) Ibid. 59.


