1. INTRODUCTION
CHAPTER - I
INTRODUCTION

The University Education Commission set up in 1948 to investigate the condition of the system of University Education, remarked "We are convinced that if we are to suggest any single reform in University Education, it would be that of examination." This, Dr. S. Radha Krishnan's statement, still stands true even after forty years of period.

The story of the movement of examination reform in India makes a fascinating reading. Numerous committees have been formed to study examination reform. The Hunter Commission (1882) was the first to point out the need for reforming examinations in India. It stated, "It is beyond doubt that the greatest evil from which the system of Indian University Education suffers is that teaching is subordinated to examination and not examination to teaching."

The Calcutta University Commission (1917-19) and the Hartog Committee Report (1929) also identified several short comings in the examination system. After India became an Independent nation, the University Education Commission (1948) was equally vocal in its criticism of examinations. The secondary Education Commission (1952-53) raised some fundamental issues with regard to the role of examinations. The examination reform movement was given a strong impetus by the Kothari Commission (1964-66). These committees published a volumes of reports, but no concrete steps to implement proper suggestions have
been taken. The reasons for the delay in implementation as well as the reforms suggested have been included as a separate chapter in this study. Needless to say that among the other areas of reform, the most sensitive area is that of evaluation.

The examinations today dictate curriculum instead of following it, prevent any experimentation, hamper the proper treatment of subjects and sound methods of teaching, foster a dull uniformity rather than originality, encourage the average pupil to concentrate too rigidly upon too narrow a field and thus help him to develop wrong values in education. Pupils assess education in terms of examinations. In short, external examinations are exercising a restricting influence over the entire field of education to such an extent as almost to nullify its real purpose.

These external examinations also serve the purpose of providing information about students information that may be used by teachers and others to decide the suitability of a student for a subsequent course either at college or at an establishment of higher education, information that may determine whether a student is an acceptable entrant to certain professions, information that may be used by employers for recruitment and in allocating the individual to a role in industry, trade or commerce. Also the recognition of the student in the society depends on the degree he possesses.
The present day system of Education is examination oriented. The importance of degrees and diplomas is greater than engrossing in any faculty of knowledge. The result is that our teachers also have become examination minded. Naturally the devices of teaching are ignored. Our educationists are raising voice against this. But it is found that it is the age-old practice in Examination system. As Dr. Bloom observed during his excellent workshops on Evaluation in Higher Education in our country, there is no system of education but a system of examinations. The restrictive influence of these external examinations on the development of the curricula in our higher education is not our present concern; but the high regard paid to examination results and the general belief that these results provide irrefutable and complete evidence of a young person's level of academic attainment and, indeed, of his potential, must arouse deep concern regarding the nature of such examination. The necessity then of a careful consideration of conventional methods of examining techniques is a matter of prime importance particularly to teachers for whom the welfare and future prospects of their students matter.

Today, examination has a modern form of sophistication. It has no practical aspect of individual life. The candidate often becomes a number rather than a name. In the examination, he is given the same set of questions, permitting the same varieties of choice as his companions up and down the country. The marking of the scripts is hurried and superficial. The
marks obtained in examinations are not a reliable measure of a student's performance. Written examinations as they are prevalent at present suffer from some serious short-comings. The chief among them are emphasis on memorisation, subjectivity and poor content coverage. This is because, the written examinations, particularly encourage selective study and cramming because they are more likely to have a set of stereotyped and general questions. Hence the examinations have come to dominate the educational process because passing them is more important than acquiring any education.

To restrict the measurement of students attainment to the consideration of evidence consisting solely of a written script or scripts, completed in stipulated periods of time on certain dates is insufficient data for deducing the results of such consequence to the individual. The trend of development in recent years has been to augment rather than replace conventional techniques. However, the nature and functions of end, of course of written examinations have been considerably improved. Our university examinations, as they function now whether at the end of a year or at the end of a semester, assess abilities like recall of facts, recall of principles, use of numerical data, construction of hypotheses, assessment of hypotheses, design of experiments and coherent communication. But restricting the measurement of a student's abilities to the use of a single technique, may well mar the value of the result. If what constitutes attainment in any area of the curriculum is set
down, then the need for multiple measuring instruments becomes obvious. It is definite that the outcomes of courses of instruction consist of more than the ability to recall and use information. They rather involve the acquisition of a range of abilities and skills and the development of certain behaviours. Outcomes of teaching learning, other than cognitive development, are development of disciplined working habits, acquisition of study skills (use of reference books), establishment of interests, development of aesthetic tests, social sensitivity and inculcation of a social attitude etc. The development of matching forms of assessment has, however, been slow and research into such techniques has not yet produced clearly defined and universally accepted forms. The difficulties are formidable but must not deter those who wish to undertake the task.

One must realise, however, that curricula and examinations are two sides of the same coin and it is only when they operate together that the goals of education can be adequately and satisfactorily reached. When the teacher is involved with curriculum development, the link between education and examination is strengthened and the task become complementary. Opportunities offered to teachers to control examinations, have integrated examinations more realistically and usefully with the teaching in colleges. In this role, the first task of teachers, individually (in local groups or in the subject panels of boards) is to state in precise terms the objectives that are the outcomes of learning
a subject at a particular level. Logically the next step is to plan learning experiences appropriate for getting students to attain these objectives. Such experiences will vary with the kind of objective aimed at and must be put together to form some kind of a coherent programme or course outline. Next it is obviously necessary to check how far the learning experiences have actually produced the desired results in terms of stated objectives. This evaluation process will identify the strengths and weaknesses of the plans conceived and experiences provided to attain the objectives. As a result of evaluation, it is possible to note in what respects it needs improvement. Thus the ideal of "diagnostic teaching" will be close to fulfilment because of the "feed-back" that this sequence would provide. The better the system works, the greater the value of the feedback and the closer to the ideal to be achieved.

The evaluation system adopted by the Indian Universities has been logging credibility rapidly. This deterioration started in the Post World War II period when a large number of students began to join American Universities. Many of them came back to teach in India and brought back with them the distrust of the external examination system. Therefore when reforms began to be suggested in the mode of valuation, the trend was to suggest the American pattern. But before this idea could germinate, came the period between 1960 and 1970 when India probably registered the maximum growth in the number
of Educational Institutions. This expansion led to the strengthening of the external examination system instead of weakening it. Kothari Commission (1964-66) emphasising this point said:

"In the present system, when the future of students is totally decided by one external examination at the end of the year, they (students) pay minimum attention to the teachers, do little independent study through most of the academic year and cram accurately for the final examination. The crippling effect of external examinations on the quality of work in higher education is so great that examination reform has become crucial to all the progress"1.

Thus this problem of evaluation of answer books at the University Examinations still remains unsolved. As Heywood remarked:

"The best known criticism of examination relates to their reliability (Hartog and Rhodes 1935); much has been and will undoubtedly be written about this aspect as not all avenues seem to have been explored"2.

This problem of assessment of answer books has discussed at length by Harper and Mishra in their recent publication "Research on Examinations in India"3. Their research findings indicate that the marking of answer scripts depends entirely on the examiner's mood. Other findings showed that personal bias or prejudice in favour of or against a candidate also affected the marking to a significant extent. This naturally
led to more and more students being dis-satisfied with the assessment and consequently applying for revaluation in a particular paper or subject.

1.1 CONCEPT OF EVALUATION

Since revaluation forms the focus of this study it is necessary to define what the process of revaluation is. But even before that it is imperative that some light be thrown on the concept of evaluation itself. According to V. Natarajan, "Evaluation means a set of measurements and more importantly value judgement of these measurements".

For any evaluation to be sound there must be an element of objectiveness and absoluteness which is a difficult criterion to fulfil and this leads to a lot of errors. The errors may be due to all kinds of reasons both innocent and deliberate. V.N. Pandit in his paper "Scrutiny of answers" enumerates the mistakes commonly made by examiners. These observations were made by him after study of the results of Nagpur University.

1. Marks given to a question inside did not tally with those written against that question on the cover page.
2. Total of marks for the answer book was wrong.
3. Wrong posting of marks i.e. marks awarded to a question inside were written against a different question on the cover page.
4. Marks entered in words on the cover page were not the same as those in figures.

5. An answer or answers was/were left unvalued.

6. An excess answer was valued.

7. Even when nothing was written by the candidate, marks were allotted to blank pages.

8. Marks were awarded to stupid statements like "Sir, be kind to me and give me pass marks."

9. Make awarded to an answer were more than the maximum allotted to it by the setter.

10. Even when the candidate answered all the questions, marks given to some were not entered on the cover page.

11. While entering the marks in the foils and counterfoils, they were written against wrong roll numbers.

12. Marks entered in foils and counterfoils were wrong.

13. Marks awarded to a candidate on the answer book were not entered at all in the foils and counterfoils.

14. Roll numbers or enrolment numbers were not written or were wrongly written on the foils and counterfoils.

15. Foils were prepared but counterfoils were not.

16. Alterations were done without signature.

17. Answer books were not signed.

A glance at the above list indicates that some errors were serious while others were minor but the effect on the final result of the candidate was magnified tenfold thus leading to revaluation.
1.2 THE REVALUATION PROCEDURE.

Revaluation as defined by V. Natarajan is "... a procedure by which candidates having appeared for an examination and being not satisfied with the result, can get their answer scripts re-examined which involves both checking up of the total marks and also seeing that no portion of the answer book was left unvalued by the examiner, as also getting the answers revalued by an examiner other than the one who initially valued it" 4.

The concept of revaluation revolves around the concept of error in marking due to -

1. subjectivity of marking
2. Biased sampling to topics and abilities.
3. Arbitrary time limits.
4. Indifferent evaluation or victimization.

Revaluation has been an accepted procedure for a long time, in fact it has evolved alongside the examination system itself. Studies have shown that in some universities the marks after revaluation have changed by 200 to 400 percent which definitely reflects poorly on the system of evaluation.

Different Universities adopt different procedures for applying for revaluation. A brief description of the procedure for Amravati University where this study has been conducted is presented for review. To give a comparative picture the rules adopted by other Universities of the same state are also stated.
1.3 RULES FOR REVALUATION IN DIFFERENT UNIVERSITIES.

1.3.1 AMRAVATI UNIVERSITY:

A candidate may apply for revaluation to the Assistant Registrar in one or more papers within 20 days from the date of declaration of the result along with an undertaking that the result of revaluation will be binding on him and that the university shall have the right to re-examine all his/her papers even though he/she seeks revaluation only for one or some papers. In such cases the decision of the university will be binding on him. The result of revaluation is communicated to the candidate within 45 days.

Revaluation is not permitted in Practical Examination/Term work/Internal Assessment/Sessional Marks/Dissertation/Thesis/Viva-Voce and Examinations where marking is not provided. Fee for revaluation is Rs. 60/- (non refundable) per paper.

Appointment of examiners for revaluation is made by the Hon'ble Vice-Chancellor from the list of examiners recommended by section 73 committee and approved by the Executive Council. The answer Books are revalued by two examiners other than the original examiner who valued them initially. In case the appointment of examiners is made from outside the University area or in case where no name is available or found suitable in the given list, the Hon'ble Vice-Chancellor is authorised
to make appointment on behalf of the boards of studies, section 73 committee and the Executive Council.

The examiners are provided with the guidelines (if prepared by the paper setter) to enable them to value the answer books in the light of these. Each of the two examiners receives a remuneration of Rs. 10/- for assessing per revaluation Answer Books.

If the average of marks awarded by the two examiners varies from the marks given by the original examiner by 5% or more of the maximum marks, this average of marks is awarded to the candidate, and the original marks are deemed null and void.

If as a result of revaluation (i) the examinee attracts the provisions of Condonation of deficiency and of Exemptions and compartments, those are applied to him, (ii) the examinee if eligible for Division, Merit, Medals, Prizes etc., the same are granted to him. On the basis of the report of revaluation from the examiner or otherwise, if the malafide of the original examiner in his valuation work is suspected, the Vice-Chancellor may take necessary action against him.

1.3.2 NAGPUR UNIVERSITY:

A candidate may apply for revaluation to the Assistant Registrar in one or more papers within 30 days from the date of
declaration of the result along with an undertaking that the result of revaluation will be binding on him and that the university shall have the right to re-examine all his/her papers even though he/she seeks revaluation only for one or some papers. In such cases the decision of the university will be binding on him. The result of revaluation is communicated to the candidate within 45 days.

Revaluation is not permitted in Practical Examination/Term Work/Internal Assessment/Sessional marks/Dissertation/Thesis/Viva-Voce and Examination where marking is not provided. Fee for revaluation is Rs. 100/- (non refundable) per paper.

The appointment of two examiners is made by the Executive Council from outside the University area and they are provided with the guidelines (if prepared by the paper setter) to enable them to value the answer books in the light of these. Each of the two examiners receives a remuneration of Rs. 20/-. If the average of marks awarded by the two examiners varies from the marks given by the original examiner by 5% or more of the maximum marks, this average of marks is awarded to the candidate, and the original marks are deemed null and void.

If as a result of revaluation (i) the examinee attracts the provision of Condonation deficiency and of Exemption and Compartments, those are applied to him, (ii) the examinee if eligible for Division, Merit, Medals, Prizes etc., the
same are granted to him. On the basis of the report of revaluation from the Examiner or otherwise, if the malifice of the original examiner in his valuation work is suspected, the Vice-Chancellor may take necessary action against him.

1.3.3 MARATHWADA UNIVERSITY:

Any candidate who has passed the examination or has failed in not more than two papers can ask for revaluation of two papers at any single examination.

Application for revaluation is to be made by the candidate or his parent/guardian through the principal of the college within 30 days from the declaration of the result. The result of the revaluation is communicated to him within a period of eight weeks after the date of receipt of the application.

The revaluation is not permitted in (1) the examination where is a double valuation i.e. where each paper is valued independently by two examiners; (2) practical examinations, sessional marks, dissertation, thesis and viva-voce.

The revaluation fee is Rs. 50/- per paper. The process of revaluation includes the scrutiny of answer scripts for verification of marks. Along with the application for revaluation the candidate has to give an undertaking in writing that the revaluation result, favourable or otherwise, will be binding on him.
The answer script to be evaluated is sent by the Vice-Chancellor to an examiner of his choice who is supplied along with the paper some five answer books at random from the same examination to give an idea of the standard followed by the university along with model answers and scheme of marking.

A separate list of external examiner's is prepared by a special committee.

If as a result of revaluation the marks differ from the original marks obtained by the candidate before gracing by 15% or more of the maximum marks prescribed for the paper then only the result of revaluation is accepted.

1.3.4 POONA UNIVERSITY:

Prior to revaluation of answer books, a candidate has to apply for verification of marks. After knowing the result of verification of marks, he may apply for revaluation. Applications for verification of marks are entertained within a period of three weeks from the date of declaration of results and each is disposed off within a period of two weeks from the date of receipt of the valid application. The application for revaluation is entertained within a period of two weeks only, from the date of the results of the verification of marks. All applications for verification of answer scripts are to be addressed directly to the Registrar/Deputy Registrar (examinations).
Rules for revaluation of answer scripts:

The request for revaluation is granted to the candidate who has failed in more than two courses/papers, subjects as the case may be where separate passing is necessary. Revaluation is allowed in not more than two courses/papers, subjects. Revaluation is not permitted in respect of scripts of practical examination/term work/internal assessment/ sessional marks/dissertation/thesis and viva-voce. The fee for revaluation is Rs. 100/- for each course/paper for which the revaluation is ordered. The fee is non-refundable if as a result of revaluation, the marks obtained by the candidate increase over the original marks by 10% or more of the marks carried by the paper. While calculating the percentage, the fraction if any is rounded in favour of the candidate.

Mode of revaluation:

The answer books to be reevaluated are got reexamined from two separate examiners in case of B.A., B.Sc., and B.Com., examinations (except professional examinations like medicine and engineering) of the choice of the Vice-Chancellor.

The two examiners appointed for revaluation of the answer books are at least of the same status as that of the original examiner in the particular subject.

The average of marks of the answer assessed by the two examiners are taken as the marks after revaluation in the concerned courses/papers, subjects and are communicated to the candidate.
1.3.5 SHIVAJI UNIVERSITY:

For revaluation, the candidate has to apply within 15 days from the declaration of the result of the said examination. The application for revaluation of answer books should be addressed to the Deputy Registrar (examinations). The fees for the revaluation of the answer books is Rs. 60/- for each paper. This fee is non-refundable but however, if the application for revaluation is disposed of for want of eligibility three-fourth of the fees is refunded.

The revaluation of the answer books is not permitted in respect of script of Practical examinations/Term work/Internal Assessment/Sessional Marks/Dissertation/Thesis and Viva-voce etc. The revaluation scheme of answer-books of theory papers in respect of the post-graduate Degree/Diploma examinations is also made applicable in the Faculty of Medicine/Ayurvedic Medicine and Surgery and Homoeopathic Medicine and Surgery from April, 1989 examinations and onwards. However the candidate may also apply for retotalling of marks for post-graduate Degree/Diploma examinations in the Faculty of Medicine/Ayurvedic Medicine and Surgery and Homoeopathic Medicine and Surgery.

The request of candidate for revaluation is not granted if he has failed in more than three papers of passing and also permission is not granted for revaluation in not more than two papers in any semester/part.
The marks awarded in the paper by the original examiner and the marks obtained after revaluation varies by 10% or more of the maximum marks assigned to that paper, the marks after revaluation are accepted for result and the marks originally obtained by the candidate in the paper are treated as null and void.

In case if the variation is of less than 10%. The original marks remain unchanged. As a result of revaluation, the examinee is also benefited for the provisions of condonation of deficiency and of exemptions and compartments but however he is not eligible for merits, medals, prizes, or any other award.

The memorandum of instructions for guidance of the examiners if prepared by the paper setters or the scheme of marking is sent to the revaluer to enable him to evaluate the answer-book concerned in accordance with instructions/scheme of marking. The examiner is paid a remuneration of Rs. 10/- for the revaluation of the answer book.

The result of revaluation is binding on the candidate and is communicated to him by the University within a period of 6 weeks from the last date of receipt of application for revaluation.

1.3.6 UNIVERSITY OF BOMBAY:

As per the ordinance and regulations made by the University, revaluation of answer-books in respect of theory papers are
permitted at an examination conducted by the university other than post-graduate examinations.

Rules and Regulations for Revaluation of the Answer books:

A candidate applying for revaluation should not be failed in not more than two heads, when appeared in all the subjects of a University examination at one and the same sitting and he must have secured at least 50 percent of the marks required for passing in each of those heads or minimum 'C' grade in cases where grades are assigned to theory papers.

A candidate with exemption in any theory paper or papers and failed in only one head of passing prescribed for theory papers, is eligible to seek revaluation provided he has secured at least 50 percent of marks required for passing in that head or minimum 'C' grade in cases where grades are assigned to theory papers.

A candidate if failed in only one head of passing by more than 50 percent of the marks required for passing in that head, is also eligible to seek revaluation provided he should have secured ten percent of the exceeded marks in other subjects than the total marks required for passing, other than the one in which he has failed.

A candidate even though declared successful, is eligible to seek revaluation of his answer-books in only one head of passing of his choice.
A candidate should submit his application for revaluation in the prescribed form within a period of 15 days from the date of declaration of results of a university examination. The revaluation include verification of the original marks. If after verification, the original marks are revised, then the revised marks are taken into consideration for the purpose of revaluation.

An application for revaluation of answer books should be submitted to the registrar of the university alongwith a fee of Rs. 100/- per theory paper. However Rs. 50/- are charged from the candidates belonging to the economically backward class i.e. those whose parental income is Rs. 4800/- or less per annum and in the case of those belonging to scheduled castes, tribes, denotified tribes and nomadic tribes provided if they submit a certificate of income or caste/tribe, as the case may be, from the competent authority.

The result declared after revaluation is a binding on the candidate as per the undertaking given by the candidate in writing. The revised marks assigned to the theory paper or papers as a result of revaluation must accept the candidate and the original marks obtained are treated null and void.

The revised marks obtained by a candidate after revaluation are not taken into account for the purpose of award of scholarships, prizes, medals, any other award and/or for determining the order of merit.
The revaluation of answer books are not permitted in respect of:

1. the examinations conducted by the university at postgraduate level in different faculties.
2. the examinations conducted by the colleges or heads of University Departments/Recognized Institution on behalf of the University or by the Directorate of Distance Education of the University.
3. the scripts of practical examination/term work/sessional work/project work/dissertation/internal assessment and in oral/practical.

1.3.7 SHREEMATI NATHIBAI DAMODAR THACKERSEY

WOMEN'S UNIVERSITY:

A candidate who desires to have revaluation of her paper shall apply to the Deputy Registrar (exam) accompanied by a non-refundable fee of Rs. 100/- per paper (Rs. 50/- per paper only in case of undergraduate certificate and Diploma examinations) within thirty days from the date of declaration of the results of the examination and the revaluation shall include verification of marks.

The candidate applying for revaluation of her answer paper shall have to give an undertaking to the effect that the result of the revaluation shall be binding on her and that she shall accept the result of the revaluation instead of the original.
valuation also the university shall have the right to re-examine all her papers even though she seeks revaluation only of one paper. In such a case, the decision of the University shall be binding on her.

The marks obtained after revaluation whether exceed or recede the original marks obtained by the candidate in the paper by ten percent or more of the maximum marks assigned to that paper, in which case the marks originally obtained by the candidate in the paper shall be treated as null and void.

The revaluation of answer books shall not be permitted in respect of scripts of practical examination/term work/internal assessment/sessional marks/dissertation/thesis/viva-voce and examinations where marking is not provided and also in case of examinations where the system of dual assessment is in vogue.

The revised marks obtained by a candidate after revaluation, is accepted by the University for the purpose of amendment of her result in accordance with the rules of the university, but these marks shall not be taken into account for the purpose of award of scholarships, prizes, medals and/or the order of merit.

The delay in the declaration of revaluation results for any reason whatsoever shall not confer any right upon the student for admission to higher class, but however shall be regulated in accordance with the relevant ordinances and rules framed by the university.
Application of the candidate will not be accepted if she has failed in more than one paper.

To sum up the overall picture, the university examination is now depending on the result of the revaluation. Actually the revaluation is almost a general examination in the university. Hence the need of the day is to review the total evaluation system in its totality. Therefore the study of the "Effect of revaluation on the examination results" became more meaningful. Keeping this view the present researcher has taken the following research proposed for his Ph.D. degree individually.

1.3.8 SCOPE OF THE PRESENT STUDY:

The present study is entitled: "A CRITICAL STUDY OF EFFECTS OF REVALUATION ON THE RESULTS OF CANDIDATES APPEARING AT AMRAVATI UNIVERSITY EXAMINATIONS". The present study critically studies the cases of revaluation presented to Amravati University in all faculties from the year 1984 to the year 1988.

Objectives of the study:

1. To study comparatively the number of students applying for revaluation in every faculty in every examination, yearwise.
2. To study the percentage of increase in the number of cases for revaluation every year, facultywise.
3. To identify the subjects in which revaluation is maximum, facultywise and examinationwise.

4. To study the correlations between the original marks and revalued marks and see the significance.

5. To study critically the rules and regulations about revaluation in the various universities of Maharashtra.

6. Make specific suggestions on the basis of the results of the investigation with respect to the process of revaluation.

Hypotheses:

1. Certain specific subjects in every faculty have more cases for revaluation than other subjects in the faculty.

2. There is no significant difference between the original and revalued marks.

3. The correlation between the original and revalued marks will be significantly high.

The present study has been conducted in the Amravati University from the 1984 examinations to the 1988 examinations of all faculties. All cases for which revaluation has been applied for have been considered in this study.

SAMPLE:

As mentioned in the scope of the study the candidates
of all faculties from the year 1984 to the year 1988 have been included in the sample for this study. While a detailed analysis of the summer examinations have been made, the data of the winter examinations of these years have been taken into consideration for a comparative study.

For this purpose the records of the Amravati University from the year 1984 to the year 1988 were consulted and the following details were obtained in the prepared proforma.

1. Year of examination
2. Name of examination
3. Subject for which revaluation was applied.
4. Maximum marks per paper.
5. Original marks.
6. Revalued marks.
7. Change in result.

The total sample of all the years combined ran into about 35,000 cases and the data was collected for a period of over a year.

PLAN OF RESEARCH:

In the first chapter "Introduction" the present pattern of the examination system is presented. It also includes concept of revaluation, the meaning of revaluation procedure and the rules and regulations adopted by different universities in Maharashtra, scope of the study and the statistical techniques applied are discussed.
In chapter II, the Indian and foreign literature related to the subject is presented.

Chapter III includes concepts of examination reform. In this chapter, the recommendations of the various committees for reforming the examination pattern are mentioned.

The organisation, analysis and interpretation of data is mentioned in the IV chapter. In this chapter, the data of all the faculties is interpreted after organising and analysing yearwise and subjectwise. The analysis and interpretation were done on computer.

Chapter V includes conclusions, testing of hypotheses and suggestions drawn after interpretation of the data.

Lastly, the bibliography and the appendices are presented in chapter VI and VII.

STATISTICAL TECHNIQUE APPLIED:

1. The null hypotheses pertaining to the differences between the two means (i.e., the original marks and the revalued marks) was tested by obtaining 't' ratio by calculating the standard error of the difference between two correlated means.

2. Pearson's product-moment correlation formula was used for -
   a) original marks and revalued marks.
   b) revalued marks and difference scores and
   c) original marks and difference scores.
The calculated 'r' was tested for significance by directly matching the same with values of 'r' by referring to relevant table (Garrett) at 0.05 and 0.01 level.

The means, standard deviation and coefficients of correlation were calculated with the help of the computer for the purpose of proper interpretation of the data. Cases regarding the change of result were classified into various categories and then the whole data interpreted with the help of computer.
1.3.9. REFERENCES:


