## CHAPTER ONE

## INTRODUCTION

### 1.1 General Background

Language is an arbitrary voluntary vocal system of human communication. It helps us to preserve, transmit and continuously enrich the achievement of human culture. Language is a special gift only for human (i.e. it is human specific). Human beings are known as superior of all living beings due to language. We exchange our ideas, thoughts, feelings, desires, emotions, selfexpression etc. by the help of language. Language helps us to think, interpret, perceive and express most of the activities of our daily life. It is the most frequently used means of communication where information is transmitted from a sender to a receiver. In the process of communication one perceives the clear picture of the whole world through the language. Language is a symbolic system based in pure or arbitrary convention infinitely extendable and modifiable according to the changing needs and conditions of the speakers. Language organizes sounds and vocal symbols with meaningful unit. Language is a system of systems (there are four levels in every language; they are phonological, morphological, syntactic and semantic levels). Language is a skilled habitual behavior. Language is the most valuable single possession of human race. It is a social phenomenon which is used in our society to establish the human relationship. Language is free from stimulus control and it is much conditioned by time and geography. It is difficult to trace back the origin of language but it can be assumed that the development of language is as old as human being. There are two purposes of language. They are general and specific. In specific purpose language is used for specific needs of particular group. In general purpose, it is a programme, which aims to general language proficiency.

English is the most commonly used means of communication all over the world. So it is an international language. All the countries of the world are connected with each other by the help of the English language. English is the largest language of the UNO. English is the most important language in every field and sector of the world. It is the language of world communication, politics, marketing, trade, medicine, science and technology, Foreign affairs and many more. Without learning English, we cannot be able to interact with other people who are unknown with our language. The English language for these days becomes a basic need for human beings. One must learn English for survival. Science and Technology is the main part of today's world. To know and learn about it also we need English because most of the materials about it are printed and available in Roman script. About half of the world's books of different subjects have been written in English. The scope, need and demand of the English language is increasing day by day to turn the world into modern civilization. By these reasons the English language has got the highest position. It is spoken as a native language or official language in many countries.

Realizing the importance of English, it is taught as a foreign language in all schools of Nepal starting from grade one to bachelor level as a compulsory subject. In the education system of Nepal, it has been significantly influenced by Britain. English language teaching, in Nepal, was formally started in B.S. 1910 by Janga Bahadur Rana in Durbar High School.

The English language is taught in different countries for different purposes.

- International purpose (to increase international relation)
- National purpose (To use it as a lingua franca)

In Nepal English is taught to communicate with the outside world.

### 1.1.1 Language teaching and testing

Language teaching is an art. It can be defined as the teaching of language for communicative purpose. Language teaching is an application of language theories, methods and techniques in actual teaching learning activities. Language teaching involves teaching of both first and second/foreign languages.

Testing is an inherent part of teaching. We cannot separate testing from teaching. Both teaching and testing go together. They are two parts of the same coin. Testing is inevitable for we have to assess the achievement of the students as well as the effectiveness of the programme itself. Test may be constructed primarily as a means of assessing the student's performance in the language.

According to Heaton (1975, p.1) language testing, in the past, was considered as a separate entity from teaching. But both testing and teaching are so closely interrelated that it is virtually impossible to work in either field without being constantly concerned with each other. Testing is conducted for finding out the performance of the students for the purpose of comparison, selection, gradation etc. Testing is used to find out how far learners have learned what the teacher wishes them to learn, whether the learner understands what has been taught or not.

Language testing is important for language teaching through which the teacher will be able to compare, select, grade and provide certificate among his/her students. It also helps to evaluate the effectiveness of teaching style, syllabus, methods, approaches, techniques, materials etc. The classroom test is concerned with evaluation for the purpose of enabling teachers to increase their own effectiveness by making adjustments in their teaching to enable certain groups of students or individuals in the class to benefit more. It tries to find out what activities the candidates can do. A well constructed classroom test will provide the students with an opportunity to show their ability to perform certain tasks in the language. The test should also enable the teacher to ascertain which
parts of the language programme have been found difficult by the class. The testing can be conducted after teaching, during the teaching time or before teaching to know the level of the students. Testing is equally important for remedial measures. Testing offers useful inputs to the teachers to be aware of the effect of his teaching. Testing has become an instrument to contribute to change in the way teachers perform in the classroom, and the way reform takes place in the whole system of education.

### 1.1.2 Reading skill

As we know language is the medium of communication, reading is also a part of communication. The writer communicates with a reader. The reader remains in constant interaction with the writer. A reader gets the message that writer has expressed by using symbols. The reader interacts with the writer's assumptions, thoughts, beliefs, idea, feeling, self-expression etc. He/she compares the ideas that he gets from the writer with his previous ideas about the topics. So, simply we can define reading as understanding and interpreting a text. Reading involves different information processing mechanism. A competent reader will quickly reject the irrelevant information and find what he is looking for. In other words, the reader will select only that information which he needs/wants.

Reading and reading comprehension are interchangeably used in a language, because understanding a text means comprehending it. Reading comprehension seeks only relevant information. Reading comprehension is extracting required information from the written text as efficiently as possible. Reading comprehension varies according to the purpose of reading and type of the text. Reading comprehension is the combination of some reading sub-skills. According to Munby (1979) as mentioned in Khaniya (2005, p.131-32), followings are the sub-skills which exist in reading comprehension:

- Recognizing the script of language.
- Deducing the meaning and use of unfamiliar lexical items
- Understanding explicitly stated information
- Understanding information not explicitly stated
- Understanding conceptual meaning
- Understanding the communicating value (function) of sentences and utterances
- Understanding relations within the sentence
- Understanding relations between the parts of a text through lexical cohesion devices
- Understanding cohesion between parts of a text through grammatical cohesion devices
- Interpreting text by going outside it
- Recognizing indicators in discourse
- Identifying the main points or important information in a piece of discourse
- Distinguishing the main idea from supporting details
- Extracting salient points to summarize (the text, an idea, etc.)
- Selective extraction of relevant points from a text
- Basic reference skills
- Skimming
- Scanning
- Scanning to locate specifically required information
- Transcoding information to diagrammatic display


### 1.1.2.1 Testing reading

Testing reading depends on the purpose and level of learners. We must be aware of testing reading because it starts with the recognition of script of a language to complex reading like understanding conceptual meaning, understanding relations within the sentence etc. Question setters must be familiar with reading sub-skills as well which are involved in reading skills before testing the learners. It is useful to include a variety of text type for reading comprehension as far as possible. While testing reading we must try to test only reading skill nothing else. For example, essay type questions are not suitable for reading skill because they test learner's writing skill. Different test can be given for testing reading; some of them are as follows:

- Multiple-choice item
- True-false item
- Matching item
- Completion item
- Rearrangement item
- Short-answer questions etc.


### 1.1.3. Quality of a good language test

There are several virtues that should be taken into consideration while designing a test. There are some qualities which are essential to develop test items. Some scholars pointed only a few qualities and some pointed many but there are some qualities which are common to all. These qualities are as follows.
a) Validity
b) Reliability
c) Administrability
d) Scorability
e) Economy

For our purpose I am going to describe only two i.e. validity and reliability

### 1.1.3.1. Validity

The validity of a test is "The extent to which it measures what it is supposed to measure and nothing else" (Heaton 1975, p.159). According to this view a measure will be valid if it does what it intends to do. Validity relates to whether a research instrument is measuring what it set out to measure. Kumar (1999, p.137) defines validity as the ability of an instrument to measure what it is designed to measure. Validation of an exam would imply whether the exam is sufficient to elicit the ability to perform the given tasks that become the main concern in validation process. Validity measures how far the information it provides is accurate. Likewise according to Hughes (1989, p.22) "A test is said to be valid if it measures accurately what it is intended to measure."

So we can define validity as the outcomes of the test which reveal its aim i.e. purpose of test. A valid test reflects the real image of test what is intended to measure. Validity is the correlation of the test with some outside independent criteria. Validity can be achieved and verified indirectly by correlating the scores on a test with those of another test or criterion which is valid. A valid exam for one purpose may not necessarily be valid for another purpose. Every test, whether it is a short, informal classroom test of a public examination, should be as valid as the constructor can make it. The test must aim to provide a true measure of the particular skill which it intends to measure. The validity of a test is measured on the basis of how far the information it provides is accurate and representative in light of the purposes for which it is administered. If we try to measure writing skill, at that time we must prepare such questions which help us to test writing skill, not reading skill and other. For example: The test will be invalid if we provide passage for writing skill. The question setter or examiner must use those types of instrument which measure what it was designed to measure.

Two approaches are used to establish the validity of an instrument: the establishment of a logical link between the objectives of a study and the questions used in an instrument, and the use of stastical analysis to demonstrate this link.

There are five types of validity. They are:
a) Face validity
b) Content validity
c) Concurrent validity
d) Predictive validity and
e) Construct validity
(Kumar 1996, p.138)

### 1.1.3.2. Reliability

Reliability is the stability of measurement. No results are reliable unless they are stable. In other words, it refers to the consistency of results. The dependability of score obtained from a psychological assessment or from psychological test is referred to reliability. How far a test is reliable? We find out its reliability according to its dependable quality. If the scores of two tests are similar or almost similar at that time we can say that the test is more reliable. "To be reliable, a test must be consistent in its measurement", Heaton (1975, p.162). It is assumed that the performance of the examinee remains more or less the same if the examinee is asked to repeat the same exam of similar type. It is a matter of the extent to which we can believe that the performance is true, how likely it is that the performance will be repeated next time. "Reliability is the degree of accuracy or precision in the measurements made by a research instrument" (Kumar 1996, p.140). The reliability of an instrument refers to its ability to produce consistent measurement each time. When we administer an instrument under the same or similar conditions to the same population and obtain similar results, then it is reliable. "The more similar the scores would have been, the more reliable the test is said to be",
(Hughes 1989, p.29). The underlying concept of reliability is that whatever is measured is not only a property of the exam, it is also a property of the examinees' performance. When we administer an instrument under the same or similar condition to the same population and obtain similar results, then we can say that the instrument is reliable. Other things being equal the higher the reliability, the better the exam.

Reliability is of primary importance in the use of both public achievement and proficiency tests and classroom tests. Reliability is necessary characteristics of any good test for it to be valid. Reliability can be dealt with at least two levels: test and retest of students and marking and remarking their work. But there are some more ways to find out the reliability. The consistency in the performance is determined by carrying out some statistical analysis (i.e. the reliability coefficient). There are some factors which may affect the reliability of a test. They are:

- The extent of the sample of material selected for testing: whereas validity is concerned chiefly with the content of the sample, reliability is concerned with the size. The larger the sample (i.e. more tasks the testees have to perform), the greater the probability that the test as a whole is reliable - hence the favoring of objective tests, which allow for a wide field to be covered.
- The administration of the test: Is the same test administered to different groups under different conditions or at different times? Clearly, this is an important factor in deciding reliability, especially in tests of oral production and listening comprehension.
- Test instructions: Are the various tasks expected from the testees made clear to all candidates in the rubrics?
- Personal factors such as motivation and illness.
- Scoring the test: One of the most important factors affecting reliability. Objective tests overcome this problem of marker reliability, but subjective tests are sometimes faced with it: hence the importance of the work carried out in the fields of the multiple-marking of compositions and in the use of rating scales.
(Heaton 1975, p.162-63)

According to Khaniya (2005, p.109) following are the factors that contribute to the reliability of the test:

- Homogeneity of items: if a test has the test items testing the more or less the same trait, the test will have high reliability.
- A test with high discriminating power items will produce high reliability.
- Variability of group- students with a wide range of ability will yield high reliability.
- Sufficient test taking time will give high reliability.
- A test with less freedom of choice will yield high reliability.
- A test with unambiguous items will have high reliability.
- Objectivity in scoring will give high reliability.
- Length of the test also contributes to produce high reliability; longer the test, higher the reliability.

So we can say that any exam /evaluation will not be reliable unless they give the stable results.

Regarding the methods of establishing the reliability of a test, several methods are discussed:

- One method of measuring the reliability of a test is to readminister the same test after a lapse of time.
- Next method of measuring the reliability of a test is by dividing the marks of a single test into two halves and correlating them.
- Another means of estimating the reliability of a test is by administering parallel forms of the test to the same group.
- And the reliability of the whole test can be estimated by using the formula:

$$
\mathrm{r}_{\mathrm{xy}}=\frac{\mathrm{N}}{N-1}\left(1-\frac{m(N-m)}{N X^{2}}\right)
$$

Where, $\quad \mathrm{N}=$ the number of items in the test,

$$
\begin{aligned}
& m=\text { the mean score on sthe test for all the testees, } \\
& X=\text { The standard deviation of all the testees' scores } \\
& r_{x y}=\text { Reliability }
\end{aligned}
$$

Heaton (1975, p.164)

According to Kumar (1996, p.141-42)) there are three methods to find out reliability of test. They are:
a. Test-retest method
b. Parallel form method and

## c. Split-half method

### 1.1.4. Split-Half Method

This is one way of obtaining reliability. The split-half method is based on the principle that, if accurate measuring instrument were broken into two equal parts, the measurements obtained with one part would correspond exactly to those obtained with other. In this method, a test is administered a single time but it is designed to correlate half of the items with the other half and is appropriate for instruments that are designed to measure attitudes towards and issue and phenomena. It is necessary for the test to be split into two halves which are really equivalent, through the careful matching of items. In this method, a correlation between the two halves is established as a measure of the reliability of the test. The questions are divided into two halves, in such a way that questions which test the same aspect of language fall into two different halves. The scores obtained in two halves are correlated. According to this method, the examinee who obtains low score in the first half tends to score low in the second half and the examinee who obtains high score in the first half tends to score high in the second half. In split-half method, two halves of the same test will be considered two equivalent tests.

This method contains several drawbacks. If the second half is more difficult than the first half or vice-versa, the mark obtained from these two halves may differ which may lead to the possibility of decreasing reliability co-efficient.

To find out the reliability, by using this method, the following procedure should be applied: First of all the obtained marks of the testees are put into two halves. Then, by calculating two halves, CC will be found out. And at last by applying the Spearman-Brown formula reliability will be found out.

Different procedure should be used to divide the scores into two halves. Some of them are: Correlating between the two halves by dividing the whole questions into two groups serially (i.e. 1, 2,3,4,5 into one group and 6, 7 ,

8,9,10 into next group). Correlating between the scores on the odd numbered items and even numbered items(i.e. $1,3,5,7, \ldots$.into one half and $2,4,6,8, \ldots \ldots$.into next half). And if the items are graded according to increasing difficulty, the following procedure will be followed to balance the items:

| First group | $: 1$ | 4 | 5 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Second group | $: 2$ | 3 | 6 | 7 | 10 |

### 1.2. Review of the related literature

So many studies have been carried out in the field of testing in the Department of English Education. Some of them are as follows:

Khanal (1997) had done a study entitled "A study on the effectiveness of the close test over conventional objective test in testing reading comprehension in English." And he found out that the private schools' students performed better than governmental schools' students in both objectives and the close test.

Similarly, Batala (2004) carried out a study on the validity of the SLC examination English question paper. He found out that the SLC English examination has good content validity. In other words, the SLC English examination has really tested what it has been supposed to test. He also found out that SLC examination English question paper has very low predictive validity.

Bhattarai (2004) in his M.Ed. thesis "The reading comprehension and speed of PCL $1^{\text {st }}$ year and Grade-11 students" found that the eleven graders have comparatively better reading comprehension ability and speed than those of PCL first year students.

Likewise, Aryal (2005) carried out a study on content validity of Grade 12 compulsory English examination-2061. He found out that the rubric of the all questions was simple grid scientific. He also found out that the question of

English was neither easy nor very difficult. He further found out that $40 \%$ of the course of meaning into words and $59 \%$ of the contents of heritage of words were not covered.

Adhikari (2007) carried out a study on, "The effectiveness of test retest method to measure reliability of the test item." He found out that textual question remain more reliable than non-textual question. He also found out that objective questions were more reliable than subjective questions. Long subjective question like essay writing, paragraph writing, conversation and story writing lack the reliability. And he suggested that objective test items should be focused rather than subjective test items.

Shrestha (2007) carried out a study on "Reliability using test-retest method." She found out that the reliability of test-retest method in assessing writing skill is high. And in writing test also the reliability in controlled writing is high. The reliability of test-retest method in sentence matching, guided writing and free writing is also high. She suggested that test-retest method should be used to ensure the reliability of test items in assessing writing skill.

By above mentioned detail, we knew that there were many studies in this field but no one tried to carry out the research on reliability in terms of split-half method. So the researcher has selected this topic for the study.

### 1.3. Objectives of the study

This study has the following objectives:
a) To find out the effectiveness of split-half method to measure reliability of the reading skill.
b) To compare the reliability of split-half method in terms of the following variables:

- School-wise
- Sex-wise
- Item-wise
c) To suggest some pedagogical implications.


### 1.4. Significance of the study

The finding of this study will be useful for those who are involved in the field of language teaching and testing. It will be very important for the language teachers, students, researchers, question setters, examiners etc. It will play an important role in the area of language teaching and testing. It will be equally important for those who are involved in the area of psychology, research methodology and so on.

## CHAPTER TWO

## METHODOLOGY

In order to fulfill the objectives, the researcher applied the following methodology:

### 2.1. Sources of Data

The researcher used both primary and secondary sources of data for his study.

### 2.1.1 Primary Sources

The primary sources of data for this research were the students of class X .

### 2.1.2 Secondary Sources

The secondary sources of data were related books, like Heaton (1975), Hughes (1989), Lado (1961), Khaniya (2005),etc, articles, journals, magazines, email, internet and the theses approved in the department and all the related materials which were available in print and electronic media.

### 2.2 Population of the Study

The population of the study was eighty students of class $X$ who successfully completed the examination of class IX. He took the sample population from Shree Sunkoshi Higher Secondary School and Shree Kshamadevi Secondary School, Sindhupalchock.

### 2.3 Sampling Procedure

The researcher selected 20 girls and 20 boys from each school by random sampling procedure.

### 2.4 Tools for Data Collection

The researcher designed a set of tests himself based on old S.L.C. questions (appendix-1). The test items were designed to assess only reading skill. Two passages for reading comprehension were selected. The test included both objectives and subjective type of questions carrying 50 marks. Matching, multiple choice, true-false, re-arranging and short answer questions were included in the question.

All questions were divided into two parts to find out their reliability. The process of dividing them into two parts was as follow:

| First part | 1 | 3 | 5 | 7 | 9 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Second part | 2 | 4 | 6 | 8 | 10 |

Then the researcher correlated between the scores on the odd numbered items and those on the even numbered item.

### 2.5 Process of Data Collection

The researcher visited the selected schools (Shree Sunkoshi Higher Secondary School and Shree Kshamadevi Secondary School, Sindhupalchock) to collect the data. He explained the purpose of his visit and objectives of his study to the schools authorities. When he got permission, he went to the class-room. He gave his introduction to the students. Necessary instructions were given to the students about the test. He conducted the test by the help of subject teachers of those schools. One hour and fifteen minutes time was given to the students. Most of the students finished within allocated time. After finishing, he collected the answer sheets. He prepared an answer key and checked the answer sheets. He calculated the marks.

### 2.6 Limitation of the study

The researcher could not cover a wide range of validity and reliability, so this study had the following limitations.
a. This research was limited to only two schools of Sindhupalchock district. (i.e. Shree Sunkoshi higher secondary school and Shree Kshamadevi secondary school)
b. Only the students of grade-ten were taken.
c. Only 80 students were the population of the study.
d. Only split-half method is used in this study
e. Only the reading skill was measured.
f. The test items were selected from Grade-nine book and SLC old questions.

## CHAPTER THREE

## ANALYSIS AND INTERPRETATION

This chapter describes the analysis and interpretation of the data, which were collected from different schools. The researcher collected the data from the students of class ten by selecting ten questions from two passages of class nine course book (based on old S.L.C. questions). The researcher administered the test in two schools (i.e. Shree Sunkoshi Higher Secondary School and Kshamadevi Secondary School) of Sindhupalchok district. He put the obtained marks in two parts:

$$
\begin{array}{ll}
\text { First Part } & : 1,3,5,7 \text { and } 9 \\
\text { Second Part } & : 2,4,6,8 \text { and } 10
\end{array}
$$

He checked the answer sheets and calculated the scores. He had used different statistical tools to analyze and interpret the data. He had used mean, correlation coefficient and reliability to analyze them. The collected data and information were analyzed under three different headings.

- School-wise description of reliability
- Sex-wise description of reliability
- Item-wise description of reliability

To analyze collected information, the researcher used the following formula:
A. $r_{x y}=\frac{N(\Sigma X Y)-(\Sigma X)(\Sigma Y)}{\sqrt{\left.\left[N \Sigma X^{2}-(\Sigma X)^{2}\right] N \Sigma Y^{2}-(\Sigma Y)^{2}\right]}}$
(Hatch \&Farhady 1982, p.199)
Here,
$\mathrm{r}_{\mathrm{xy}}=$ Correlation coefficient
$\mathrm{X}=$ Score of first half
$\mathrm{Y}=$ Score of second half
B. $\quad \mathrm{R}_{11}=\frac{2 \times \text { Coefficient of split halves }}{1+\text { Coefficient of Split halves }}$

Here,

$$
\mathrm{R}_{11}=\text { Reliability }
$$

C. Reliability

$$
\begin{aligned}
& \mathrm{R}_{11} \leq 0.3=\text { Poor Reliability } \\
& \mathrm{R}_{11} \geq 0.3 \text { and } \leq 0.7=\text { Moderate/ Satisfactory Reliability } \\
& \mathrm{R}_{11} \geq 0.7=\text { High Reliability }
\end{aligned}
$$

### 3.1 Holistic Description of Reliability of Split-Half Method

Eighty students of grade ten were the population of this study. Selected test items were administered to the grade ten students. Appendix-2 and the following table show the description of obtained data from those schools.

Table No. 1

## Holistic Description of Reliability

| Mean <br> part -1 | Mean <br> part -2 | CC | Reliability |
| :--- | :---: | :---: | :---: |
| 15.64 | 15.56 | 0.73 | 0.84 |

Out of 25 marks in each part the students got the average mark 15.64 in the first part and 15.56 in the second part which seems nearly the same. The CC of the test is 0.73 and the reliability is 0.84 . It denotes that the reliability of splithalf method is high in assessing reading skill.

### 3.2 School-wise Description of Reliability of Split-Half Method

The researcher obtained the data from two schools of the Sindhupalchock district. The school-wise description of information about the data is presented below.

### 3.2.1 Shree Sunkoshi Higher Secondary School (SSHSS)

The researcher selected forty students of this school to get the data. Selected test items were administered to the grade ten students. The following table shows the description of obtained data from this school.

Table No. 2
Marks Secured by the Students of SSHSS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Apsara Raut | 11.5 | 7 | 18.5 |
| 2 | Arun Kumar Yadav | 12 | 12 | 24 |
| 3 | Bhupendra Gurung | 19 | 18.5 | 37.5 |
| 4 | Bibek Raut | 18.5 | 13 | 31.5 |
| 5 | Bijay Adhikari | 14 | 12.5 | 26.5 |
| 6 | Bikash Raj Adhikari | 8 | 8 | 16 |
| 7 | Bishal Gurung | 17 | 20 | 37 |
| 8 | Bishal Jirel | 21 | 16.5 | 37.5 |
| 9 | Deepesh Rijal | 17.5 | 16.5 | 34 |
| 10 | Devina Khatri | 19 | 16 | 35 |
| 11 | Dinesh Basnet | 14.5 | 16 | 30.5 |
| 12 | Gita Gurung | 19 | 15.5 | 34.5 |
| 13 | Gopal Tamang | 19 | 16 | 35 |
| 14 | Indira Raut | 11.5 | 17.5 | 29 |
| 15 | Keshar B.K. | 16.5 | 13.5 | 30 |
| 16 | Lalita B.K. | 7 | 8 | 15 |
| 17 | Mina Thami | 8 | 15 | 23 |
| 18 | Nikhil Raj Shrestha | 19 | 19 | 38 |
| 19 | Nirmala Gurung | 7 | 9 | 16 |
| 20 | Pabita Thami | 9 | 9 | 18 |
| 21 | Palden Sherpa | 16 | 17 | 33 |
| 22 | Pem Dorje Tamang | 11 | 9.5 | 20.5 |


| 23 | Pragati Thami | 13 | 12.5 | 25.5 |
| :--- | :--- | ---: | ---: | ---: |
| 24 | Pramila Gurung | 14 | 13.5 | 27.5 |
| 25 | Pramila Khatri | 22.5 | 22.5 | 45 |
| 26 | Pramita Gurung | 15 | 12.5 | 27.5 |
| 27 | Rachana Dahal | 12 | 9.5 | 21.5 |
| 28 | Rajeena karki | 22.5 | 22.5 | 45 |
| 29 | Rajendra Basnet | 8 | 11.5 | 19.5 |
| 30 | Raju Karki | 23 | 22.5 | 45.5 |
| 31 | Ramesh B.K. | 13.5 | 11 | 24.5 |
| 32 | Renu Khatri | 14 | 11.5 | 25.5 |
| 33 | Resham Dahal | 16 | 20 | 36 |
| 34 | Rita Thami | 10.5 | 6.5 | 17 |
| 35 | Sagar Sahi | 23 | 22.5 | 45.5 |
| 36 | Sampurna Gurung | 13.5 | 10.5 | 24 |
| 37 | Sanga Sherpa | 16 | 15.5 | 31.5 |
| 38 | Sarita Tamang | 17.5 | 16 | 33.5 |
| 39 | Swasthani Adhikari | 12 | 12 | 24 |
| 40 | Tek Maya Thami | 7 | 8.5 | 15.5 |
|  | Total | 588 | 566 | 1154 |

Mean of Part $1 \quad: 14.7$
Mean of Part $2: 14.15$
CC
: 0.83
Reliability : 0.91

The above mentioned table shows that there were 40 students who took the test.
They got the average score 14.7 in the first part and 14.15 in the second part.
Likewise, the CC of test is 0.83 and the reliability is 0.91 which is very high.
That means the reliability of split-half method is high in this school.

### 3.2.2 Shree Kshamadevi Secondary School (SKSS)

The researcher selected forty students of this school to get the data. Selected test items were administered to the grade ten students. The following table shows the score variation among the students.

Table No. 3
Marks Secured by the Students of SKSS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Anita Bhandari | 16.5 | 17.5 | 34 |
| 2 | Anita Shrestha | 17 | 16.5 | 33.5 |
| 3 | Anita Thapa | 16.5 | 16 | 32.5 |
| 4 | Anjana Khadka | 19.5 | 18 | 37.5 |
| 5 | Bhagawati Thapa | 13.5 | 16.5 | 30 |
| 6 | Bikash Khatri | 18.5 | 22 | 40.5 |
| 7 | Binda Thapa | 11 | 11 | 22 |
| 8 | Devendra thakur | 16.5 | 16 | 32.5 |
| 9 | Devi Basnet | 13.5 | 15.5 | 29 |
| 10 | Dipak Basnet | 17.5 | 16.5 | 34 |
| 11 | Dipendra Thapa | 21 | 23 | 44 |
| 12 | Durga Thapa | 14.5 | 19 | 33.5 |
| 13 | Gyanu Shrestha | 18 | 18 | 36 |
| 14 | Januka Thapa | 16 | 18.5 | 34.5 |
| 15 | Kabita Bhujel | 18 | 19 | 37 |
| 16 | Kamal Khatri | 16.5 | 19.5 | 36 |
| 17 | Kamala Basnet | 15 | 19 | 34 |
| 18 | Madhav Basnet | 18.5 | 21 | 39.5 |
| 19 | Malika Karki | 14 | 16 | 30 |
| 20 | Manakamana Basnet | 15 | 14.5 | 29.5 |
| 21 | Matrika Basnet | 13 | 18.5 | 31.5 |


| 22 | Mohan Bahadur Timsina | 17 | 8 | 25 |
| :--- | :--- | ---: | ---: | ---: |
| 23 | Niru Bhandari | 19 | 18.5 | 37.5 |
| 24 | Parshu Ram Shrestha | 6 | 11 | 17 |
| 25 | Pawan Bhandari | 21 | 14 | 35 |
| 26 | Prakash Bhandari | 16.5 | 21.5 | 38 |
| 27 | Prem Tamang | 19.5 | 18 | 37.5 |
| 28 | Purna thapa | 18 | 20 | 38 |
| 29 | Radha Thapa | 17.5 | 14.5 | 32 |
| 30 | Rajani Raut | 18.5 | 16.5 | 35 |
| 31 | Rajindra Basnet | 10.5 | 6.5 | 17 |
| 32 | Ram Sharan Raut | 16 | 15.5 | 31.5 |
| 33 | Ravi Thapa Magar | 17 | 11 | 28 |
| 34 | Sanjib Thapa | 18.5 | 21.5 | 38 |
| 35 | Sapana Raut | 15 | 19.5 | 38 |
| 36 | Saraswati Basnet | 24 | 21 | 45 |
| 37 | Sita Shrestha | 18 | 15 | 33 |
| 38 | Sunita Bhandari | 15 | 15.5 | 30.5 |
| 39 | Susila Khadka | 20.5 | 18.5 | 39 |
| 40 | Susmita Moktan | 663.5 | 678.5 | 1342 |
|  |  |  |  |  |

Mean of Part $1 \quad: 16.59$
Mean of Part $2: 16.96$
CC : 0.51
Reliability : 0.68

The above table shows that 40 students of this school participated in the test. Out of 25 marks in each part they got the average mark 16.59 in the first part and 16.96 in the second part. The CC of the test in this school is 0.51 and the reliability is 0.68 . It denotes that the reliability of split-half method is satisfactory in this school.

## a. Comparison

Two schools were used to collect data and required information for the study. After analyzing the data obtained from these two schools the researcher got the following information: Out of these two schools SSHSS got 0.91 and it was the higher reliability than that of SKSS which got 0.68 .

### 3.3 Sex-wise Description of Reliability of Split-Half Method

Forty male and forty female students were taken as the sample population from two schools. The sex-wise description of this study is presented below.

### 3.3.1 Male students

Forty male students were selected to get data by random sampling procedure. The following table shows the score variation among the students.

Table No. 4

## Marks Secured by the Male Students

| S.N. | Students name | Part 1 | Part 2 | Total |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Arun Kumar Yadav | 12 | 12 | 24 |
| 2 | Bhupendra Gurung | 19 | 18.5 | 37.5 |
| 3 | Bibek Raut | 18.5 | 13 | 31.5 |
| 4 | Bijay Adhikari | 14 | 12.5 | 26.5 |
| 5 | Bikash Khatri | 18.5 | 22 | 40.5 |
| 6 | Bikash Raj Adhikari | 8 | 8 | 16 |
| 7 | Bishal Gurung | 17 | 20 | 37 |
| 8 | Bishal Jirel | 21 | 16.5 | 37.5 |
| 9 | Deepesh Rijal | 17.5 | 16.5 | 34 |
| 10 | Devendra thakur | 16.5 | 16 | 32.5 |
| 11 | Devi Basnet | 13.5 | 15.5 | 29 |
| 12 | Dinesh Basnet | 14.5 | 16 | 30.5 |
| 13 | Dipak Basnet | 17.5 | 16.5 | 34 |
| 14 | Dipendra Thapa | 21 | 23 | 44 |


| 15 | Durga Thapa | 14.5 | 19 | 33.5 |
| :---: | :---: | :---: | :---: | :---: |
| 16 | Gopal Tamang | 19 | 16 | 35 |
| 17 | Gyanu Shrestha | 18 | 18 | 36 |
| 18 | Kamal Khatri | 16.5 | 19.5 | 36 |
| 19 | Keshar B.K. | 16.5 | 13.5 | 30 |
| 20 | Madhav Basnet | 18.5 | 21 | 39.5 |
| 21 | Matrika Basnet | 13 | 18.5 | 31.5 |
| 22 | Mohan Bahadur Timsina | 17 | 8 | 25 |
| 23 | Nikhil Raj Shrestha | 19 | 19 | 38 |
| 24 | Palden Sherpa | 16 | 17 | 33 |
| 25 | Parshu Ram Shrestha | 6 | 11 | 17 |
| 26 | Pawan Bhandari | 21 | 14 | 35 |
| 27 | Pem Dorje Tamang | 11 | 9.5 | 20.5 |
| 28 | Prakash Bhandari | 16.5 | 21.5 | 38 |
| 29 | Prem Tamang | 19.5 | 18 | 37.5 |
| 30 | Purna thapa | 18 | 20 | 38 |
| 31 | Rajendra Basnet | 8 | 11.5 | 19.5 |
| 32 | Rajindra Basnet | 10.5 | 6.5 | 17 |
| 33 | Raju Karki | 23 | 22.5 | 45.5 |
| 34 | Ram Sharan Raut | 16 | 15.5 | 31.5 |
| 35 | Ramesh B.K. | 13.5 | 11 | 24.5 |
| 36 | Ravi Thapa Magar | 17 | 11 | 28 |
| 37 | Resham Dahal | 16 | 20 | 36 |
| 38 | Sagar Sahi | 23 | 22.5 | 45.5 |
| 39 | Sanga Sherpa | 16 | 15.5 | 31.5 |
| 40 | Sanjib Thapa | 16.5 | 21.5 | 38 |
|  | Total | 648 | 647 | 1295 |

Mean of Part $1 \quad: 16.2$
Mean of Part $2: 16.18$
CC : 0.65
Reliability : 0.79

The above table shows that 40 male students were participated in the test. Out of 25 marks in each part they got the average mark 16.2 in the first part and 16.18 in the second part. The CC of the test is 0.65 and the reliability is 0.79 . It denotes that the reliability of split-half method is high in male students.

### 3.3.2 Female students

Forty female students were selected to get data by random sampling procedure. The following table shows the score variation among the students.

Table No. 5
Marks Secured by the Female Students

| S.N. | Students name | Part 1 | Part 2 | Total |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Anita Bhandari | 16.5 | 17.5 | 34 |
| 2 | Anita Shrestha | 17 | 16.5 | 33.5 |
| 3 | Anita Thapa | 16.5 | 16 | 32.5 |
| 4 | Anjana Khadka | 19.5 | 18 | 37.5 |
| 5 | Apsara Raut | 11.5 | 7 | 18.5 |
| 6 | Bhagawati Thapa | 13.5 | 16.5 | 30 |
| 7 | Binda Thapa | 11 | 11 | 22 |
| 8 | Devina Khatri | 19 | 16 | 35 |
| 9 | Gita Gurung | 19 | 15.5 | 34.5 |
| 10 | Indira Raut | 11.5 | 17.5 | 29 |
| 11 | Januka Thapa | 16 | 18.5 | 34.5 |
| 12 | Kabita Bhujel | 18 | 19 | 37 |
| 13 | Kamala Basnet | 15 | 19 | 34 |
| 14 | Lalita B.K. | 7 | 8 | 15 |
| 15 | Malika Karki | 14 | 16 | 30 |
| 16 | Manakamana Basnet | 15 | 14.5 | 29.5 |
| 17 | Mina Thami | 8 | 15 | 23 |
| 18 | Nirmala Gurung | 7 | 9 | 16 |


| 19 | Niru Bhandari | 19 | 18.5 | 37.5 |
| :--- | :--- | ---: | ---: | ---: |
| 20 | Pabita Thami | 9 | 9 | 18 |
| 21 | Pragati Thami | 13 | 12.5 | 25.5 |
| 22 | Pramila Gurung | 14 | 13.5 | 27.5 |
| 23 | Pramila Khatri | 22.5 | 22.5 | 45 |
| 24 | Pramita Gurung | 15 | 12.5 | 27.5 |
| 25 | Rachana Dahal | 12 | 9.5 | 21.5 |
| 26 | Radha Thapa | 17.5 | 14.5 | 32 |
| 27 | Rajani Raut | 18.5 | 16.5 | 35 |
| 28 | Rajeena karki | 22.5 | 22.5 | 45 |
| 29 | Renu Khatri | 14 | 11.5 | 25.5 |
| 30 | Rita Thami | 10.5 | 6.5 | 17 |
| 31 | Sampurna Gurung | 13.5 | 10.5 | 24 |
| 32 | Sapana Raut | 18.5 | 19.5 | 38 |
| 33 | Saraswati Basnet | 15 | 21 | 36 |
| 34 | Sarita Tamang | 17.5 | 16 | 33.5 |
| 35 | Sita Shrestha | 24 | 21 | 45 |
| 36 | Sunita Bhandari | 18 | 15 | 33 |
| 37 | Susila Khadka | 15 | 15.5 | 30.5 |
| 38 | Susmita Moktan | 20.5 | 18.5 | 39 |
| 39 | Swasthani Adhikari | 12 | 12 | 24 |
| 40 | Tek Maya Thami | 703.5 | 597.5 | 1201 |
|  |  |  |  |  |

Mean of Part $1 \quad: 15.09$
Mean of Part $2: 14.94$
CC $\quad 0.80$
Reliability : 0.89

The above table shows that 40 female students were participated in the test. Out of 25 marks in each part they got the average mark 15.09 in the first part and
14.94 in the second part. The CC of the test is 0.80 and the reliability is 0.89 . It denotes that the reliability of split-half method is high in female students.

## a. Comparison

Students of two schools were taken as the sample population for the study. In sex-wise comparison, both the female students and the male students got the high reliability but the female students got the higher reliability than the male students. The female students got 0.89 and the male students got 0.79 .

### 3.4 School and Sex-wise Description of Reliability of Split-Half Method

The researcher selected 20 girls and 20 boys from each school by random sampling procedure for his study. The school and sex-wise description is presented below.

### 3.4.1 Male students of SSHSS

Twenty male students involved in the test. Their obtained marks in both parts are presented below.

Table No. 6
Marks Secured by the Male Students of SSHSS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :--- | :--- | :--- | :--- | :--- |
| 1 | Arun Kumar Yadav | 12 | 12 | 24 |
| 2 | Bhupendra Gurung | 19 | 18.5 | 37.5 |
| 3 | Bibek Raut | 18.5 | 13 | 31.5 |
| 4 | Bijay Adhikari | 14 | 12.5 | 26.5 |
| 5 | Bikash Raj Adhikari | 8 | 8 | 16 |
| 6 | Bishal Gurung | 17 | 20 | 37 |
| 7 | Bishal Jirel | 21 | 16.5 | 37.5 |
| 8 | Deepesh Rijal | 17.5 | 16.5 | 34 |
| 9 | Dinesh Basnet | 14.5 | 16 | 30.5 |


| 10 | Gopal Tamang | 19 | 16 | 35 |
| :--- | :--- | ---: | ---: | ---: |
| 11 | Keshar B.K. | 16.5 | 13.5 | 30 |
| 12 | Nikhil Raj Shrestha | 19 | 19 | 38 |
| 13 | Palden Sherpa | 16 | 17 | 33 |
| 14 | Pem Dorje Tamang | 11 | 9.5 | 20.5 |
| 15 | Rajendra Basnet | 8 | 11.5 | 19.5 |
| 16 | Raju Karki | 23 | 22.5 | 45.5 |
| 17 | Ramesh B.K. | 13.5 | 11 | 24.5 |
| 18 | Resham Dahal | 16 | 20 | 36 |
| 19 | Sagar Sahi | 23 | 22.5 | 45.5 |
| 20 | Sanga Sherpa | 16 | 15.5 | 31.5 |
|  | Total | 322.5 | 311 | 633.5 |

Mean of Part $1 \quad: 16.13$
Mean of Part $2: 15.55$
CC : 0.83
Reliability : 0.91

Above table shows that, 20 male students took part in the test. By the score they got, the researcher found out that the mean of test in the first half is 16.13 and in the second half, the mean is 15.55 . CC of the test is 0.83 and the reliability is 0.91 . It means the reliability of split-half method in male students is very high.

### 3.4.2 Female students of SSHSS

Twenty female students involved in the test to find out the reliability in terms of split-half method in assessing reading skill. Their description and the marks obtained by them are presented below:

Table No. 7
Marks Secured by the Female Students of SSHSS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Apsara Raut | 11.5 | 7 | 18.5 |
| 2 | Devina Khatri | 19 | 16 | 35 |
| 3 | Gita Gurung | 19 | 15.5 | 34.5 |
| 4 | Indira Raut | 11.5 | 17.5 | 29 |
| 5 | Lalita B.K. | 7 | 8 | 15 |
| 6 | Mina Thami | 8 | 15 | 23 |
| 7 | Nirmala Gurung | 7 | 9 | 16 |
| 8 | Pabita Thami | 9 | 9 | 18 |
| 9 | Pragati Thami | 13 | 12.5 | 25.5 |
| 10 | Pramila Gurung | 14 | 13.5 | 27.5 |
| 11 | Pramila Khatri | 22.5 | 22.5 | 45 |
| 12 | Pramita Gurung | 15 | 12.5 | 27.5 |
| 13 | Rachana Dahal | 12 | 9.5 | 21.5 |
| 14 | Rajeena karki | 22.5 | 22.5 | 45 |
| 15 | Renu Khatri | 14 | 11.5 | 25.5 |
| 16 | Rita Thami | 10.5 | 6.5 | 17 |
| 17 | Sampurna Gurung | 13.5 | 10.5 | 24 |
| 18 | Sarita Tamang | 17.5 | 16 | 33.5 |
| 19 | Swasthani Adhikari | 12 | 12 | 24 |
| 20 | Tek Maya Thami | 7 | 8.5 | 15.5 |
|  | Total | 265.5 | 255 | 520.5 |

Mean of Part $1: 13.28$
Mean of Part $2: 12.75$
CC : 0.79
Reliability : 0.88

The above table describes that there were 20 testees who attended the test. On the basis of the above table, the mean of the first part is 13.28 and the second part is 12.75 . Likewise the CC of the test is 0.79 and reliability is 0.88 which means the reliability of split-half method is high in female students of SSHSS.

### 3.4.3 Male students of SKSS

Twenty male students of this school were selected to get data by random sampling procedure. The following table shows the description of obtained data from the male students of this school.

Table No. 8
Marks Secured by the Male Students of SKSS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Bikash Khatri | 18.5 | 22 | 40.5 |
| 2 | Devendra thakur | 16.5 | 16 | 32.5 |
| 3 | Devi Basnet | 13.5 | 15.5 | 29 |
| 4 | Dipak Basnet | 17.5 | 16.5 | 34 |
| 5 | Dipendra Thapa | 21 | 23 | 44 |
| 6 | Durga Thapa | 14.5 | 19 | 33.5 |
| 7 | Gyanu Shrestha | 18 | 18 | 36 |
| 8 | Kamal Khatri | 16.5 | 19.5 | 36 |
| 9 | Madhav Basnet | 18.5 | 21 | 39.5 |
| 10 | Matrika Basnet | 13 | 18.5 | 31.5 |
| 11 | Parshu Ram Shrestha | 6 | 11 | 17 |
| 12 | Prakash Bhandari | 16.5 | 21.5 | 38 |
| 13 | Prem Tamang | 19.5 | 18 | 37.5 |
| 14 | Purna thapa | 18 | 20 | 38 |
| 15 | Pawan Bhandari | 21 | 14 | 35 |
| 16 | Rajindra Basnet | 10.5 | 6.5 | 17 |
| 17 | Ram Sharan Raut | 16 | 15.5 | 31.5 |


| 18 | Ravi Thapa Magar | 17 | 11 | 28 |
| :---: | :--- | ---: | ---: | ---: |
| 19 | Sanjib Thapa | 16.5 | 21.5 | 38 |
| 20 | Mohan Bahadur Timsina | 17 | 8 | 25 |
| Total | 325.5 | 336 | 661.5 |  |

Mean of Part $1 \quad: 16.28$
Mean of Part $2: 16.8$
CC : 0.49
Reliability : 0.65

Above table shows that, 20 male students took part in the test. By the score they got, the researcher found out that the mean of test in the first half is 16.28 and in the second half, the mean is 16.8 . CC of the test is 0.49 and the reliability is 0.65 . It means the reliability of split-half method in male students of this school is satisfactory.

### 3.4.4 Female students of SKSS

Twenty female students involved in the test from this school. Their description and the marks obtained by them are presented below:

Table No. 9
Marks Secured by the Female Students of SKSS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Anita Bhandari | 16.5 | 17.5 | 34 |
| 2 | Anita Shrestha | 17 | 16.5 | 33.5 |
| 3 | Anita Thapa | 16.5 | 16 | 32.5 |
| 4 | Anjana Khadka | 19.5 | 18 | 37.5 |
| 5 | Bhagawati Thapa | 13.5 | 16.5 | 30 |
| 6 | Binda Thapa | 11 | 11 | 22 |
| 7 | Januka Thapa | 16 | 18.5 | 34.5 |
| 8 | Kabita Bhujel | 18 | 19 | 37 |
| 9 | Kamala Basnet | 15 | 19 | 34 |


| 10 | Malika Karki | 14 | 16 | 30 |
| :--- | :--- | ---: | ---: | ---: |
| 11 | Manakamana Basnet | 15 | 14.5 | 29.5 |
| 12 | Niru Bhandari | 19 | 18.5 | 37.5 |
| 13 | Radha Thapa | 17.5 | 14.5 | 32 |
| 14 | Rajani Raut | 18.5 | 16.5 | 35 |
| 15 | Sapana Raut | 18.5 | 19.5 | 38 |
| 16 | Sita Shrestha | 24 | 21 | 45 |
| 17 | Sunita Bhandari | 18 | 15 | 33 |
| 18 | Susila Khadka | 15 | 15.5 | 30.5 |
| 19 | Susmita Moktan | 20.5 | 18.5 | 39 |
| 20 | Saraswati Basnet | 15 | 21 | 36 |
|  | Total | 338 | 342.5 | 680.5 |

Mean of Part $1: 16.9$
Mean of Part $2: 17.13$
CC : 0.58
Reliability : 0.73

The above table describes that there were 20 testees who took the test. On the basis of the above table, the mean of the first part is 16.9 and the second part is 17.13. Likewise, the CC of the test is 0.58 and reliability is 0.73 which means the reliability of split-half method is high in female students of SKSS.

## a. Comparison

Students of two schools were taken as the sample population for the students. In terms of school and sex-wise comparison, the male students of SSHSS had done the best because they got the highest reliability (0.91). Likewise, the female students of SSHSS got the second highest reliability (0.88). The reliability of male students of SKSS was 0.65 , which was the lowest reliability in school and sex-wise description. And the reliability of female students of SKSS was 0.73.

### 3.5 Item-wise Description of Reliability of Split-Half Method

There were ten questions in the question paper. Five types of questions were used there to collect the data. They were matching, multiple choice, true-false, ordering and short answer question. Each question carried five marks. Itemwise description is presented below.

### 3.5.1 Matching

Two matching questions were included into the test. Out of them, one question was put under the first part and another under the second. The description of the obtained information is presented below.

Table No. 10

## Mean, CC and Reliability in Matching

| Mean <br> part -1 | Mean <br> part -2 | CC | Reliability |
| :--- | :--- | :--- | :--- |
| 3.29 | 4.28 | 0.31 | 0.47 |

Above table shows that, in matching items, the students got the average 3.29 marks in the first part and 4.28 marks in the second. The CC of test is 0.31 and the reliability is 0.47 which means that the reliability of matching item is moderate/satisfactory.

### 3.5.2 Multiple choice

Two sets of multiple choice questions were included into the test. Out of them, one set was put under the first part and another under the second. The description of the obtained information is presented below.

Table No. 11
Mean, CC and Reliability in Multiple Choice

| Mean <br> part -1 | Mean <br> part -2 | CC | Reliability |
| :--- | :--- | :--- | :--- |
| 3.39 | 3.61 | 0.33 | 0.49 |

Above table shows that, in multiple choice items, the students got the average 3.39 marks in the first part and 3.61 marks in the second. The CC of test is 0.33 and the reliability is 0.49 which means that the reliability of multiple choice item is moderate /satisfactory.

### 3.5.3 True-False

Two sets of true-false questions were included into the test. Out of them, one set was put under the first part and another under the second. The description of the obtained information is presented below.

Table No. 12
Mean, CC and Reliability in True-False

| Mean <br> part -1 | Mean <br> part -2 | CC | Reliability |
| :--- | :--- | :--- | :--- |
| 3.78 | 3.46 | 0.38 | 0.55 |

Above table shows that, in true-false items, the students got the average 3.78 marks in the first part and 3.46 marks in the second. The CC of test is 0.38 and the reliability is 0.55 which means that the reliability of true-false item is moderate /satisfactory.

### 3.5.4 Ordering

Two sets of ordering questions were included into the test. Out of them, one set was put under the first part and another under the second. The description of the obtained information is presented below.

Table No. 13

## Mean, CC and Reliability in Ordering

| Mean <br> part -1 | Mean <br> part -2 | CC | Reliability |
| :--- | :--- | :--- | :--- |
| 2.98 | 3.8 | 0.16 | 0.27 |

Above table shows that, in ordering items, the students got the average 2.98 marks in the first part and 3.8 marks in the second. The CC of the test is 0.16 and the reliability is 0.27 which means that the reliability of ordering item is poor.

### 3.5.5 Short answer question

Two sets of short-answer questions were included into the test. Out of them, one set was put under the first part and another under the second. The description of the obtained information is presented below.

Table No. 14
Mean, CC and Reliability in Short Answer Question

| Mean <br> part -1 | Mean <br> part -2 | CC | Reliability |
| :--- | :--- | :--- | :--- |
| 1.26 | 1.44 | 0.51 | 0.68 |

Above table shows that, in short answer question item, the students got the average 1.26 marks in the first part and 1.44 marks in the second. The CC of test is 0.51 and the reliability is 0.68 which means that the reliability of short answer question is satisfactory.

## a. Comparison

The study was carried out by collecting data from two schools. Five test items were included in the test paper allocating 10-10 marks for each item. After observing the data, it was found that short answer question had the highest
reliability (i.e.0.68) and ordering had the lowest (i.e. 0.27). In item-wise analysis, the reliability of the test item is satisfactory.

## Conclusion

The reliability of split-half method in assessing reading skill is high. As a whole, the tests are highly reliable and the split-half method is highly effective. But the reliability of some of the test items is relatively lower than that of the whole test.

## CHAPTER FOUR

## FINDINGS AND RECOMMENDATIONS

After collecting, analyzing and interpreting the data the researcher reached the following conclusions.

### 4.1 Findings

1. The reliability of split-half method in assessing reading skill was high.
2. The reliability of the test item differed from school to school, item to item and even between male and female students.
3. The reliability of the test of SSHSS was high and SKSS was satisfactory.
4. In sex-wise comparison, the reliability of the test given to the female students was higher than that of the male students.
5. In school and sex-wise comparison, the reliability of test of the male and female students of SSHSS and female students of SKSS was high. The reliability of male students of SKSS was satisfactory. The reliability of the test of male students of SSHSS was the highest and male students of SKSS was the lowest.
6. In item wise comparison, the reliability of test in short answer question, matching, multiple choice and true-false were satisfactory. Out of them short answer question showed the highest and the ordering showed the lowest reliability.
7. In personal comparison, only a few of the students got the same marks in both halves. Due to the marks variations among the students, it was concluded that the test item lacked the stability.
8. Most of the students were poor and secured below average marks in short answer questions. However, the short answer questions were most highly reliable among the test items.

### 4.2 Recommendations

On the basis of above mentioned findings, the following recommendations have been made.

1. To find out the reliability of reading test, the split-half method can be used.
2. Split-half method can be used in schools to ensure the reliability of test items.
3. Split-half method can be used in different test items to find out their reliability.
4. The instruction should be clear so that the students may understand the question which helps to increase the reliability of test items.
5. To increase the reliability, the purpose of the test should be clear before designing test items.
6. The factors, which may affect the reliability, should be kept in mind before selecting the test items and administering them.

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## APPENDIX- I

## RESEARCH QUESTION

Full marks: 50

Time: 1hour 15 minutes

Read the following passage and do the exercises given below:

This happened to me when I was in India. I used to go to my office by train. On this particular evening, I hurried to my station but when I reached there the train had gone. I bought a newspaper and a packet of biscuits and sat on a bench. While I was reading, a man came and sat down opposite me. There was nothing special about him, except that he was very tall. I was still reading when my eyes caught a very strange sight. The man reached over the table, opened my packet of biscuits, took one dipped it into his coffee and popped it into his mouth. I couldn't believe my eyes. But I didn't want to make a fuss, so I ignored it. I just took a biscuit myself and went back to my newspaper. While I was pretending to be very interested in the news, the man took a second biscuit. After a couple of minutes I casually took a biscuit, and then our eyes met. He was staring at me furiously. I nervously put the biscuit in my mouth and decided to leave. I was ready to go when the man stood up and hurriedly left. I folded my newspaper and stood up. And there on the table, where my newspaper had been, was my packet of biscuits.

1. Match the words in column ' $A$ ' with their meaning in column ' $B$ ': $\mathbf{- 5}$

Column ' $A$ '
(a) casually
(b) except
(c) folded
(d) fuss
(e) believe

## Column 'B'

(i) closed
(ii) unnecessary excitement
(iii) in a relaxed manner
(iv) trust
(v) not including
a) The tall man stared at the writer furiously because $\qquad$
i) the writer ate his biscuits.
ii) the writer didn't let him eat the biscuits.
iii) there were no biscuits left in the packet.
b) What was the strange sight for the writer?
i) A tall man was reading his newspaper attentively.
ii) A tall man took biscuits from his packet.
iii) A handsome man was sitting opposite to the writer.
c) This incident happened when $\qquad$
i) he was at home ii) he was at office iii) he was at the railway station
d) The writer left the table $\qquad$
i) before the tall man ii) after the tall man iii) together with the tall man
e) When the writer reached the station. $\qquad$
i) the train had come ii) the train had gone iii) the tall man had opened the biscuits
3. Write ' $T$ ' for true and ' $F$ ' for false statements:
a) The writer used to go to his office by bus.
b) The tall man ate the writer's biscuits.
c) The writer bought a packet of biscuits and a book.
d) The writer had to go to his office.
e) The tall man was writer's friend.
4. Rewrite the following sentences putting them in correct order:
a) When the writer reached the station the train had gone.
b) The writer used folded his newspaper and stood up.
c) The tall man stared at the writer furiously.
d) While the writer was reading, a tall man came there.
e) The tall man opened the writer's biscuit and dipped into his mouth.
5. Answer the following questions:
a) Why did the writer hurry?
b) Why did the writer decide to leave the place?
c) What did the writer buy at the station?
d) Why was the writer nervous?
e) Where was the writer's packet of biscuits hidden?

Read the following passage and do the activities given below:

The two boys walked slowly across the valley. Suddenly Tej stopped and sat down on a large stone. "It's no use," he said. "I can't go any further. I'm absolutely exhausted!" Bire looked at him for a minute. "Oh come on!" he said. "It's not very far now. Only three or four miles at the most. We can reach there within three hours if we start now."
"Yes, but it's uphill most of the way," Tej said. He pointed to the path in front of them. It went straight up the side of the valley. Bire sat down too. For a while the two boys said nothing. Then Tej pointed some trees about half a mile ahead. "There's a hut among those trees," he said. "Perhaps we can spend the night there."
"I'll go and take a look," Bire said. He ran down the path towards the hut and vanished among the trees. Tej followed him slowly. "What's it like inside?" he shouted. "not bad," Bire called back,"it feels a littledamp, but there's some wood in one corner, so we can light a fire."

They cleaned out the hut and lit a fire. Then they had supper. They were both tired and they did not talk much, Bire fell asleep almost at once, but Tej lay awake for a long time, watching the flames. Then he too fell asleep.

Suddenly he was awake again. The fire was nearly out. He could hear noises outside. It sounded like human voices. He woke Bire up.
"It's only the wind," he grumbled. "Go to sleep again!" But it wasn't the wind! The voices came nearer until they were just outside the hut. The door opened and a light shone on their faces. "They're here!" a voice called out. A policeman was standing in the doorway. He addressed the two boys.
"You've given us a lot of trouble," he said. "We've looked all over the valley for you two."
6. Match the words in column ' $A$ ' with their meaning in column ' $B$ '

Column 'A'
a. cottage
b. slightly wet
c. fatigue
d. difficulty
e. complained

## Column 'B'

i. trouble
ii. damp
iii. tired
iv. hut
v. grumbled
7. Tick the best answer:
a. Tej wanted to stop, but Bire wanted to $\qquad$
i) go back
ii) go on
iii) talk
b. The path in front of them was $\qquad$
i) long
ii) easy
iii) difficult
c. The boys lit a fire because $\qquad$
i) They couldn't see
ii) the hut was damp
iii) they wanted to cook
d. After supper, the boys. $\qquad$
i) fell asleep
ii) sat and talked
iii)cleaned out the hut
e. Tej woke up because $\qquad$
i) he heard a noise
ii) he was afraid
iii) he was cold

## 8. Write ' $T$ ' for true and ' $F$ ' for false statements:

a) Tej encouraged Bire to keep on trekking.
b) The hut was near the trees on the hill.
c) They fire to warm the hut.
d) The voice outside the hut made Tej wake up.
e) They heard the blowing of the wind.
9. Arrange the following sentences in correct order:
a) The boys cleaned out the hut.
b) The two boys were tired of walking.
c) They found a hut among the trees
d) A policeman appeared at the door to take them back home.
e) They lit a fire.
10. Answer the following questions:
a) Why were Bire and Tej able to light fire?
b) Who slept later and why?
c) Why did Tej wake Bire up at night?
d) What were responses when Tej woke him up?
e) What is the condition of the hut?

## APPENDIX- II

## NAME LIST OF THE RESPONDENTS AND THEIR MARKS

| S.N. | Students name | Part 1 | Part 2 | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Anita Bhandari | 16.5 | 17.5 | 34 |
| 2 | Anita Shrestha | 17 | 16.5 | 33.5 |
| 3 | Anita Thapa | 16.5 | 16 | 32.5 |
| 4 | Anjana Khadka | 19.5 | 18 | 37.5 |
| 5 | Apsara Raut | 11.5 | 7 | 18.5 |
| 6 | Arun Kumar Yadav | 12 | 12 | 24 |
| 7 | Bhagawati Thapa | 13.5 | 16.5 | 30 |
| 8 | Bhupendra Gurung | 19 | 18.5 | 37.5 |
| 9 | Bibek Raut | 18.5 | 13 | 31.5 |
| 10 | Bijay Adhikari | 14 | 12.5 | 26.5 |
| 11 | Bikash Khatri | 18.5 | 22 | 40.5 |
| 12 | Bikash Raj Adhikari | 8 | 8 | 16 |
| 13 | Binda Thapa | 11 | 11 | 22 |
| 14 | Bishal Gurung | 17 | 20 | 37 |
| 15 | Bishal Jirel | 21 | 16.5 | 37.5 |
| 16 | Deepesh Rijal | 17.5 | 16.5 | 34 |
| 17 | Devendra thakur | 16.5 | 16 | 32.5 |
| 18 | Devi Basnet | 13.5 | 15.5 | 29 |
| 19 | Devina Khatri | 19 | 16 | 35 |
| 20 | Dinesh Basnet | 14.5 | 16 | 30.5 |
| 21 | Dipak Basnet | 17.5 | 16.5 | 34 |
| 22 | Dipendra Thapa | 21 | 23 | 44 |
| 23 | Durga Thapa | 14.5 | 19 | 33.5 |
| 24 | Gita Gurung | 19 | 15.5 | 34.5 |
| 25 | Gopal Tamang | 19 | 16 | 35 |
| 26 | Gyanu Shrestha | 18 | 18 | 36 |
| 27 | Indira Raut | 11.5 | 17.5 | 29 |
| 28 | Januka Thapa | 16 | 18.5 | 34.5 |
| 29 | Kabita Bhujel | 18 | 19 | 37 |
| 30 | Kamal Khatri | 16.5 | 19.5 | 36 |


| 31 | Kamala Basnet | 15 | 19 | 34 |
| :--- | :--- | ---: | ---: | ---: |
| 32 | Keshar B.K. | 16.5 | 13.5 | 30 |
| 33 | Lalita B.K. | 7 | 8 | 15 |
| 34 | Madhav Basnet | 18.5 | 21 | 39.5 |
| 35 | Malika Karki | 14 | 16 | 30 |
| 36 | Manakamana Basnet | 15 | 14.5 | 29.5 |
| 37 | Matrika Basnet | 13 | 18.5 | 31.5 |
| 38 | Mina Thami | 8 | 15 | 23 |
| 39 | Mohan Bahadur Timsina | 17 | 8 | 25 |
| 40 | Nikhil Raj Shrestha | 19 | 19 | 38 |
| 41 | Nirmala Gurung | 7 | 9 | 16 |
| 42 | Niru Bhandari | 19 | 18.5 | 37.5 |
| 43 | Pabita Thami | 9 | 9 | 18 |
| 44 | Palden Sherpa | 16 | 17 | 33 |
| 45 | Parshu Ram Shrestha | 6 | 11 | 17 |
| 46 | Pawan Bhandari | 21 | 14 | 35 |
| 47 | Pem Dorje Tamang | 11 | 9.5 | 20.5 |
| 48 | Pragati Thami | 13 | 12.5 | 25.5 |
| 49 | Prakash Bhandari | 17 | 14 | 11.5 |


| 66 | Resham Dahal | 16 | 20 | 36 |
| :--- | :--- | ---: | ---: | ---: |
| 67 | Rita Thami | 10.5 | 6.5 | 17 |
| 68 | Sagar Sahi | 23 | 22.5 | 45.5 |
| 69 | Sampurna Gurung | 13.5 | 10.5 | 24 |
| 70 | Sanga Sherpa | 16 | 15.5 | 31.5 |
| 71 | Sanjib Thapa | 16.5 | 21.5 | 38 |
| 72 | Sapana Raut | 18.5 | 19.5 | 38 |
| 73 | Saraswati Basnet | 15 | 21 | 36 |
| 74 | Sarita Tamang | 17.5 | 16 | 33.5 |
| 75 | Sita Shrestha | 24 | 21 | 45 |
| 76 | Sunita Bhandari | 18 | 15 | 33 |
| 77 | Susila Khadka | 15 | 15.5 | 30.5 |
| 78 | Susmita Moktan | 20.5 | 18.5 | 39 |
| 79 | Swasthani Adhikari | 12 | 12 | 24 |
| 80 | Tek Maya Thami | 7 | 8.5 | 15.5 |
|  |  | 1251.5 | 1244.5 | 2496 |

