

What is bibliography? How many types of bibliographies are normally followed in a thesis? Write a critical note with illustration on bibliography.

Bibliography

- A bibliography is a list of written source used for preparing the thesis or research report. The bibliography is used in various forms such as:
- (i)Reference: This includes the list of documents which are actually used and cited in the work.
- (ii) Source Consulted: This comprises a comprehensive list of sources which is not confined to the subject itself. This points to mere consultation.

(iii)Selected Bibliography: This consists of sources those are cited and those have relevance to the subject.

- (iv) Bibliographical Notes: This contains references of sources combined with notes.
- The bibliographical entries follows an alphabetical order. The alphabetization is based on the last name(surname) of the author.
- The comprehensive list is divided mainly into two major parts. The first part records the primary sources namely basic texts and classics etc. The second part takes the list of secondary sources such as modern works, articles, unpublished materials and such other works. A separate alphabetical order may be followed for the both categories.
- The general practice of entering sources may be mentioned as follows:
- (i) The author name comes first in the bibliographical arrangement.
- (ii)The title of the book which comes next to the author's name is underlined or italicized. In case of article it is put within inverted comma.
- (iii)Then details of publication are mentioned.
- (iv)Each entry begins flush with the left margin. The subsequent lines are indented in case the entry exceeds the line.
- (v)The entries are separated by a double space.
- (vi) In case two or more works of the same author consecutively appear the author's name is represented by a short solid line which may be termed as continuous line.

The general models of bibliographical entries are as follows:

- (a) Author, Book, Publisher, Place, Year.
- (b)Author, Book, Place, Publisher, Year.
- (c) Author, Year, Book, Place, Publisher.

- (d) Author, "Article" of journal, Volume, Number, Publisher, Place, Year. The bibliographical entries may be numbered if these serve specific purpose. If the bibliography points to any historical or developmental process, the chronological order of arrangement may be preferred.

Appendix:

- An appendix refers to supplementary materials which are annexed to the text at the end. This, in other words, points to the matter which is relatively important without forming a part in the text. An appendix includes tables, illustrations, documents and such other evidences of considerable reference other than those included in the text.
- Each appendix is suitably described. When more than one appendix is used, the category should be divided and each part should be designated as APPENDIX-A, APPENDIX-B, and so on. Appendices (Appendixes) are generally placed either before or after the bibliography.

Glossary

- The glossary refers to a list of difficult or technical terms with definition or translation. The glossary differs from subject to subject. If it is felt necessary to give glossary for supporting the text for better understanding one may place it either before or after the appendix at the discretion of the author.

Index

- An index is an alphabetical list of names and subjects together with the page number. This is usually designated as (1) subject index and (2) name index as far as the scholarly work is concerned. The subject index includes all important matters discussed in a work whereas the name index consists of only names referred to in the text. The index is placed at the end of a publication.
- A research report or a thesis seldom contains an index as it is a temporary form of presentation. The index is only meant for publication work.

Illustrations

- The term illustration refers to visual representation of the matter. This is broadly divided into two parts :
- (1) Tables and (2) Figures. The term table points to a compact and orderly arrangement of facts usually in row columns. Figures, however, include photographs, paintings, maps, charts, graphs and diagrams.
- All such things are highly purposive in research. The main purpose of illustration is to assist the verbal matter included in the text. It is better to introduce the illustration in the text itself where it is necessary. It may be placed at the end of the text. But the order in which they are inserted in the text should be maintained in the list with clear reference.

Tables

- Tables are consecutively numbered and generally placed in the text or in the appendix as back matters. A table usually contains the following components :
- (i) The table number
- (ii) The title
- (iii) The box-heads
- (iv) The stud (row entries)
- (v) The field(containing data)
- While, placing table the word "TABLE" should be super scribed with the number. The title, as desired, is to be given at the top. The box-heads or column headings should be labelled describing the nature of data. The row entries, should be made as per the requirement. The space in the table should be used for inserting information.
- In case of any explanation the footnote may be placed below for describing the item. If the information is not available the dash(-) or Zero (0) may be used in the required place.

Figures :

- Figures are certain illustrative devices which are meant to emphasize the significant relationship of the text with the graphic apparatus. The word "Figure" its numbers, and its caption are mentioned below the figure.

Quotations :

- The device of quotation forms an important part in a research work. It has a definite purpose. It should not be taken as a skill of filling page or space. The following situations, in which the question of quotation arises, may be noted from the observations of Ramachandran (1984:54) :

- (1) When the quotation itself is the subject of discussion.

(2)When the quotation will lend support to one's own argument.

(3) When the writer quoted has expressed something in such a brief and effective manner that his words cannot be improved upon.

(4)When the original statement is such that a paraphrase of it might lead to misinterpretation by the reader.

- Since quotations are borrowed materials these should be brief. There are certain norms for including quotations in the text.
- (1) Direct quotations must be accurate in respect of wording, spelling and punctuation.
- (2)The omission termed as ellipsis should be indicated by three spaced full stops(...). The ellipsis may occur at the places that are relevant to one's purpose.

- (iii) Double quotation mark should be used at the beginning and the end of the quotation.
- (iv) Quotations that are placed in footnotes should be short.
- (v) When a quotation occurs within a quotation one should take care to make it accurate by reproducing it in its original form. If it is running matter the outer and the inner quotations may be separated by using double inverted commas and single inverted commas and single inverted commas respectively and vice versa.

Mechanism of Typing

- Accuracy in typing adds substantiality to the form as well as meaning of a research report or thesis. It is a general rule that the article or the thesis should be typed with double spacing. There are also some other rules which guide the mechanism of typing:

Text and Paragraph:

- The typing of the text should be double spaced. The footnotes and other bibliographical entries may be single space. For paragraph indentation six to eight space are required generally. This principle should be followed consistently through the work.

Pagination:

- A number is assigned to every page of the text. The preliminary section is numbered with one series of number as differentiated from the main section. The main section and the back matter are numbered with numerals (mainly with Arabic lower case Roman numerals (i,ii,iii). In case the work appears in Devanagari scripts (in Sanskrit) the preliminary section may be numbered with the letter like a, ā etc or ka, kha etc. The page number may be centered in the middle position at the top of the page. Each chapter or major division should be started on a new a page. In case of mistake in page number at the time of typing insertion may be made by numbering the omitted page as 10a-10b.

Quotations:

- A long quotation should be separated from the text with a mark of colon. A five spaced quotational paragraph should be indented within inverted comma. but short quotation should be incorporated in the text itself in usual manner.

Headings

- The headings are generally represented by short statements which indicate the content of the text. The headings are categorized as
- (1) Major heading (2) Sub-heading, and (3) Paragraph heading.

Major heading

- Each major division like a chapter is named with a title which is capitalized and centered two inches below the top on a new page. The text begins three spaces below the heading.

Sub-heading

- The sub-heading is also designated as side heading signifying the division of the text. This is typed flush with left margin and underlined. A considerable space is used to separate the text from the sub-heading.

Paragraph heading

- The paragraph heading indicates a clear cut successive sub-division. This is typed with usual paragraph indentation. It is also underlined and separated by three single space from the text.

Footnotes:

- As per the norm of documentation the footnotes should be typed single spaced within a footnote at the bottom of page. The footnote should be separated by a double space. In case of a long footnote the next page may be used for the purpose. A plan may be made to allot space in every page for placement of required footnotes.

Corrections and Insertions :

- All types of mistake in typing are erased and retyped. If correction and insertions are lengthy a separate sheet may be used indicating the page number and such other information therein.

Language and Style

- Besides the arrangement, the manner and language of representation constitute the general spirit of a research work. Customarily, a research work in Sanskrit is written in English, Sanskrit, Hindi and other Indian languages. Most of us are a handicap to co-ordinate the form of expression and the style in a general way owing to multiplicity of mediums.
- It is also difficult to universalize the style of presentation uniquely because the language, which is used as the medium of research report, follows its own conventions in point of appropriate linguistics and stylistic constructions. However, there are certain norms of style which points to balance of the research work.
- (i) The usage of words and expression should be polite and should follow the general rules of the language.
- (ii) The expression should be free from verbosity.
- (iii) The style should be simple and direct.
- (iv) The formality of seriousness in purpose should be maintained although.
- (v) The manner of arranging arguments should follow a diction of impersonal attitude to indicate the importance of the subject.
- (vi) Much care should be taken to avoid the use of personal pronoun like; I. The manner of writing should project the subject rather than the author.

- (vii) It should be noted that a scholarly writing is meant for learned intellectuals. The investigator should try to draw the attention of the reader to the point of originality of his contribution.
- (viii) The language of criticism should maintain courtesy. All types of criticism should be impersonal and keep to the level of truth and academic interest.
- (ix) The overall writing should project the confidence rather than the arrogance of the investigator.
- (x) Since a research writing is an art itself excessive formalities and such other rigidities should be avoided.
- A balanced research writing contributes a lot to the knowledge.

Write a critical note on Research Design.

Ans. Research Design signifies the selection of appropriate techniques to solve the identified problem under investigation. There are four types of designs which are commonly spoken in research methodology, namely descriptive, diagnostic, experimental and exploratory.

Descriptive Design:

A descriptive design is a type of research in which the characteristics of a given thing are described historically on the basis of the collected data. Thus the design is best suited to throw light on the characteristics of events, situations, groups, communities and people in the evolution of a society, different authors or concepts in different subfields. There are two methods in the application of this design, namely "Case Method" and "Statistical Method".

In the **case method** a small number of situations are studied intensively. The conclusions are drawn from the comparisons of differences and similarities. The investigations made by the philosophical method in Comparative Linguistics are examples of this case study method. For instance, the Pro-Indo-European forms are reconstructed on the basis of phonological, morphological and grammatical correspondences in the chosen basis vocabulary of different languages within the Indo-European family, comprising pronouns, names of kinship, words expressing primary actions, domestic animals, divisions of time etc. Here the researcher does not search for the correspondences for each and every words in the language, but selects only those few words which are considered to be of invariable occurrence in each and every language irrespective of differences in the degrees of civilization and material advancement.

The **statistical method** involves the study of a few factors in large number of cases. The study of averages, percentages and more sophisticated procedures are adopted. This method is well used in social sciences like Economics, Commerce and Business Management. This method is not yet fully exploited in Sanskrit studies. We find its operation in the reconstruction of the original manuscripts or at least to isolate corruption from the group of manuscripts of a work. An attempt has been made by Asko Parpola to adapt the statistical method in the decipherment of the *Indus Valley Scripts*. This shall be of immense use in the study of stylistics and sociological changes; for, the records themselves are not sufficient. In fact it needs logic to interpret the distribution of samples. The topics like "Nature in Sanskrit Literature", "Position and status of Women in Brahmanas", "Style of Bana", "Origin and growth of Sandeshakavyas" etc can be studied by applying the descriptive design.

Diagnostics Design

'Diagnosis' means scientific discrimination. For example a doctor diagnoses the cause of a disease on the basis of the symptoms found on the body and narrated by the patient. In the same way the researcher tries to find out the causes for various social situations and institutions on the basis of the classification and cross classification of the data. Thus the diagnostics design is suited to track down the causes on the basis of **principle of cause and effect analysis**(Karyakaranabhava), in contrast to the descriptive method in which the cause and effect relationship is not applied. For example, while the study of *upamalankar in Kalidasa's Raghuvansam* is a descriptive design, the "history and classification of *upamalankar* in Indian poetics" comes under the diagnostic design. Similarly such topics like "*Vedic geography*", "*falling of the status of women in the period of the Sutra*"

Literature”, “rise and fall of the Buddhism in India” and ‘the decline of sacrifices in the Medieval Andhradesa’ can be studied with profit by applying the diagnostic design.

Experimental Design

It refers to that research process in which the conclusions are drawn on the basis of testing the data practically. Like the diagnostic design, this is also aimed at to track down the cause on the principle of the cause and effect analysis..Both the designs are in fact aimed at to understand a phenomenon, but the only difference is that in the diagnostic design the facts are historical and drawn from literature, while in the experimental design the facts are directly observed. The experimental design in humanities is more difficult than in the natural sciences. The samples with which the natural scientist deals are tangible facts and the error, if any, shall be because of the researcher. In humanities, on the other hand the samples are rather conditioned by psychological and social factors and thus the defects in samples also contribute to the error in the research by the experimental design.

For example in Acoustic Phonetics the various sounds used by different speech communities are studied with the help of the scientific equipment like the spectrogram. But the subjects of research , namely the speakers, exhibit various variations because of psychological, physiological and sociological reasons. Therefore a definite success the researcher has to take all precautions to avoid subjective influences in judgments. The differences in the pronunciations of the Vedic texts in different parts of India, or the influence of vernaculars in the pronunciation of Sanskrit can be studied according to the experimental design. Further the new branches in Linguistics like Experimental Phonetics, Computation Linguistics and Applied Linguistics are productive in adapting the experimental design.

Exploratory Design

It is employed to study a phenomenon or to achieve a new insight into it. The main emphasis is on the discovery of new ideas and thus the phenomenon are studied to formulate new problems or to develop new hypotheses. Hence it is called exploratory and also formulative design and it is the same time simple because the requirement is just to collect facts and figures. Ome times, after a long search it may happen that the researcher dose not find any new conclusions for want of new data. However, it is very important as it throws open many new problems for further investigations. Let us notice a few examples-

- (I) Several researchers are being made by the scientists in tn Ayurveda and Indian Literature to identify the flora and fauna of our country. Many efforts were crowned with success. But the *Soma Creeper*, which was used in the famous *Soma Sacrifice*, is not identified till today. No plant is found on the slopes of the Himalayas, where it is supposed to be growing, corresponding totally with its description available in the Vedic Literature.
- (II) Dr. S. R.Rao, the renowned Marine Archaeologist has explored the seabed under the Arabian sea in Gujrat and found the ruins of the ancient city Dvaraka of 10th century B.C.

Write a detailed note on formal constituents of a thesis.

Formal Constituents of a Thesis

- Presentation of a research work is popularly known as research report which, in other words called thesis or dissertation. This is the final of arrangement as far as the external shape of the work is concerned.

General Structure of the Thesis

- The general structure of the thesis consists of three section:
- 1.Preliminary structure
- 2.Central structure
- 3.Reference structure

Preliminary structure

- The preliminary structure includes the following components:
- 1.Title page
- 2.Acknowledgement
- 3.Prefece
- 4.Table of contents:
- (i)List of Tables
- (ii)List of Figure(diagrams/illustration/map/tables/etc
- (iii)List of Abbreviations

Central Structure

- The main body of the text consists of the following parts:
- 1.Intoduction
- Main Body and chapters.
- 3.Conclusion(Summary/Recommendations/Suggestions)

Reference Structure

- The reference section is divided as follows:
- 1.Notes
- 2.Bibliography

- 3.Appendix
- 4.Glossary
- 5.Index(Name index and Subject index)

Title Page

- The Research report begins with the title page. It is the first page that indicates the perspective of the report or the thesis. A title page contains the following things:
- (i)Title of the topic in capital letters on the top of the page.
- (ii)Relationship of the report to the course or degree for which it is submitted in the middle of the page.(along with the name of the supervisor, if any)
- (iii)The name of the author in the same order.
- (iv)The name of the institution or department where it is submitted at the bottom of the page.
- (v)The date/year of the submission in the same order.

Acknowledgement page

- Acknowledgement page is a courtesy page in which the researcher acknowledges the scholarly guidance and assistance of the persons and institutions during his study. He also thanks those who have helped him in the other ways. It should be noted that the comments in an acknowledgement must be temperate, modest and tactful. This acknowledgement is usually signed by the author.

Preface

- A preface introduces the general chapter of the work. Although it does not form a part of the thesis it explains briefly the chief aim of the investigation. It just provides a basis for understanding the subject and method of treatment. A preface may include 'acknowledgement' if it is not written separately. A preface, which serves as an initial remark of the topic may be placed either before or table contents. Where 'introduction 'serves the above purpose, the preface may be avoided.

Table of contents:

- The 'Table of Contents' includes all the items namely preliminaries, the text and the back matter with indication of the page number. It appears after or before the preface. The number and order of titles and subtitles should be exact and identical with those that are mentioned inside the work. The text items should be placed in accordance with the division of chapters showing all headings and sub-headings.
- If necessary, the sectional fragmentation and subtitle should be indented with section reference. It also contains general abbreviations, list of illustration, figures, tables,

photographs and maps etc. as the back matters. Sometimes, abbreviation if considered important, comes among the preliminaries providing a key to the abbreviative reference in advance.

Introduction:

- The introduction is an important part of a research work. It includes the nature and significance of topic under investigation. It introduces the background, and such other factors that lead to conceptual frame of the problem. It briefly states the purpose of the study, method of treatment and solution to the problem which has been discovered and the contribution which has been significantly made.
- The introduction is formally described as the first chapter of the may bear a specific title if necessary. It further, provides a clue to the developmental process of the study. It also refers to the sources of information that have been gathered for the purpose. The manner of presenting the introduction shows the trend of the whole work.

Main body and chapters:

- The main body of the thesis is presented in the form of chapters. The chapters show stages of the development of the argument. There is no hard and fast rule as to the fixation of the number of the chapters. However, some measure of uniformity is maintained in the size and number of the chapters. The chapters should include the major division of the problem. Different issues and implications of the problem and the points of solution with support of evidence should also find place in this part of the thesis.
- If the chapter is lengthy, a summary showing the important points may be placed at the end of the chapter.
- A chapter is divided under appropriate headings and sub-headings in points of the topic and its aspects. The headings are noted as Centered-headings, side-headings, and paragraph-headings. The Centered-heading is used for major division. The side-heading is used for subdivisions.
- A paragraph-heading runs with individual paragraph. All the titles of different headings should be serialized by using numerals and letters, For instance,
 - 0.
 - 0.1.
 - 0.1.a.
 - 1.0.
 - 1.1.
 - 1.i.1.
 - 1.1.2

- 1.2.0.
- 1.2.0.1

Conclusion

- The conclusion is regarded as the last part of the work. It occupies the place of a chapter in a thesis and consists of generalization, suggestions, summaries and recommendations. The findings and spirit of arguments in the form of summary are subordinated under the conclusion section. The conclusion, as a whole, is a restatement of result of the investigation in a different form of expression. Since it relates to the finality of the
- Findings of factual information based on the data analysis it should have correspondence with the introduction in which certain claims are purposefully made.
- In addition to the above informations the researcher is expected to make some suggestions and recommendations wherever there is a necessity. The suggestion must be constructive and practicable. Specific recommendations may logically be made for further considerations.
- Moreover, suggestions for further research may be made in pursuance of one's experience that he has gathered during investigation. The researcher may indicate side problems and topics which need further investigation.

General Notes:

- General notes are meant for supporting the text. These are however not included in the text. Notes are used when there is specific purpose. There are two main purposes, namely,
- 1.Citation and
- 2.Expalnation.
- The citation is used mainly to acknowledge the source. The aim of explanation is to clarify, supplements and comment on certain points under discussion. The notes which are used briefly at the foot of a page is called footnote. That, which is placed at the end of the chapter or at the end of the work, is called simply "Note". This type of note is long and less prominent than the text. But it is always advisable that the notes should be brief.