Kaula Library Science Series-2

PRACTICAL PROCEDURE OF CLASSIFICATION

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PRACTICAL PROCEDURE OF CLASSIFICA

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Some Opinions about other book on Library Science :-

BIBLIOGRAPHY AND DOCUMENTATION, edited by **Ram Sarup Sharma.**

"It is a very helpful compilation and will be found useful and handy by librarians of special Libraries and Information Centres attached to industrial and commercial concerns".

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"It is gratifying to note that more and more books on Library Science are being added by Librarians from India. The editor of the book needs congratulations for bringing out a very useful treatise on such subject which is gaining importance now a days, not only in the foreign countries but in India also. It is compilation of 36 articles by different wellknowns authors on the subjects. They include Prof. P.N. Kaula, Prop. A.P. Srivastva, Dr. C.P. Shukla, Dr. B.K. Datta, Sh. A.B Kohli and Mr. Pierce Butler.

The Editor of this work is at present Principal of Govt. polytechnic for women, Jullundur City (P.B.). He has energy, enthusiasm and courage to embark. Upon ambitious works as such we can say with certainity that many useful books will come out from his pen. The Editor is not only a good writer and administrator but he is also an untiring crusador for the cause of librarianship. His services in the profession in the Pu[illegible] can never be forgotten."

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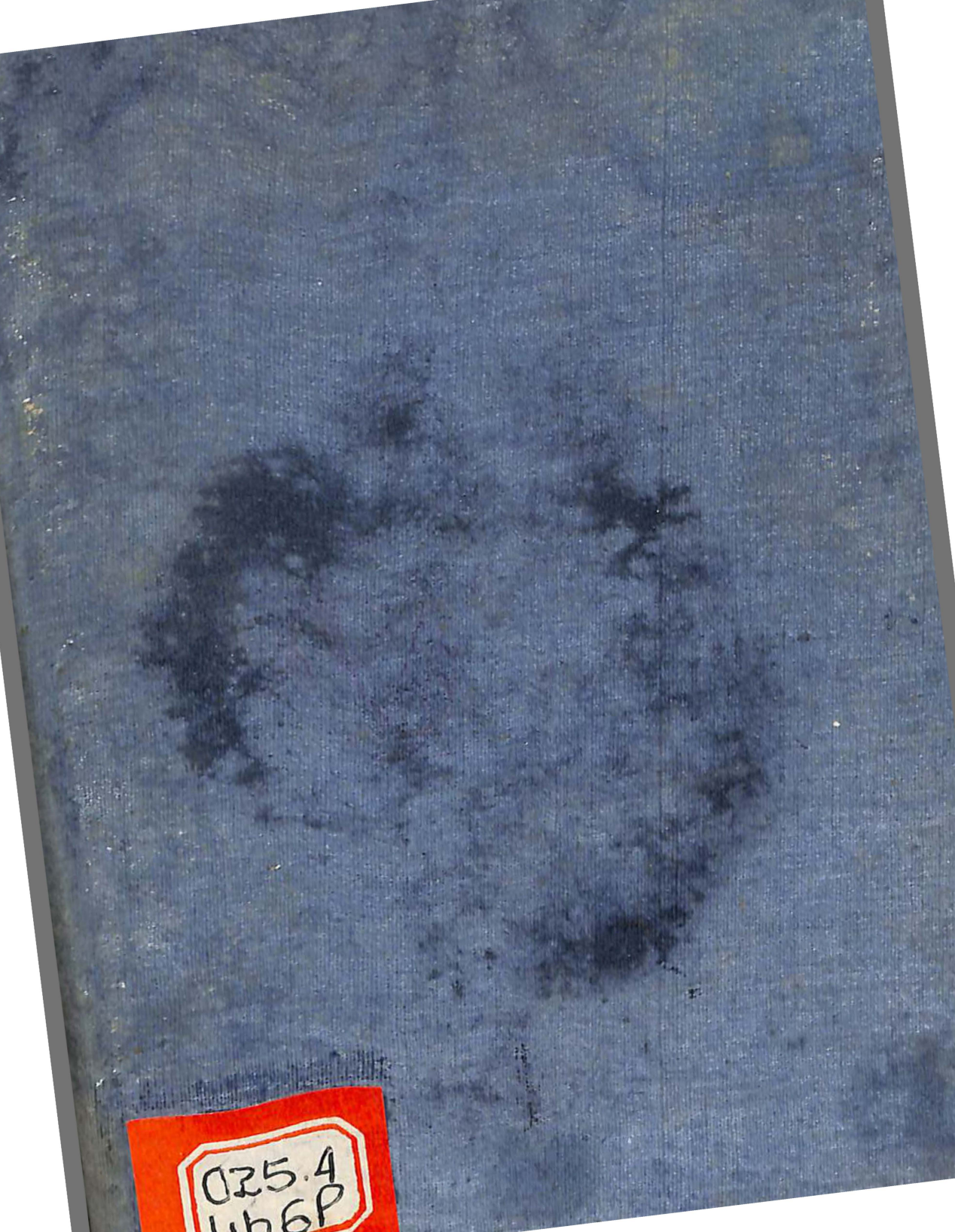

UPPAL (Om Parkash)(1940—)

Practical procedure of Classification.

(Kaula Library science series. 2).

KAULA LIBRARY SCIENCE SERIES No. 2.

PRACTICAL PROCEDURE OF CLASSIFICATION

(According to C.C. & D.D.C.)

O. P. UPPAL
M.A.,B.Lib. Sc. (BHU)

With a Foreworded

by

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MADAAN PUBLISHERS
Purani Kotwali Chowk,
PATIALA.
1975

UPPAL (OM PARKASH) (1940—

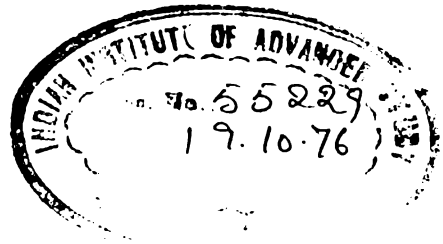
1st Edition : *1975*

2 : 51 | Uppal, Om Parkash, 1940—

L 5 | Practical procedure of Classification, by O. P. Uppal. Patiala, Madaan, 1975.

xvi, 142p. (Kaula Library Science series, no. 2)

1. Classification. I. title. (series).



Madaan Publishers,
Chowk Purani Kotwali
22, Municipal Market, PATIALA.
Printed at :
Phool Bharati Printing Press,
Mohalla Dhan, Jullundur—144001.
For Sh. Sohan Lal Madaan Proprietor,
Madaan Publishers, Patiala.

Dedicated in profound gratitude to
the sacred memory of the Late
Dr. S. R. Ranganathan
who strove all his life
to make
the library profession
what it is today.

CONTENTS

FOREWORD

I have read with great interest the manuscript of the book **Practical Procedure of the Classification** by Mr. Om Parkash Uppal, M.A.,B.Lib.Sc., who was also my student of library science at Aligarh Muslim University. He has sought to compare the two most well known schemes of classification used in India—Dewey Decimal Classification and Colon Classification. He has sought to analyse both of them from a theoretical as well as practical angle. The complicated theory and structure of the Colon Classification has been presented in a very simple and lucid style which would make it possible even for a normal reader to follow it. I am sure the publication will make a significant contribution to the literature of library science published in India, and will prove of great value to students of library science, and also to practising librarians.

T. P. Saxena
University Librarian,
Punjab Agricultural
University Library,
Ludhiana.

CONSPECTUS

This book forms the second publication of the series entitled "Kaula Library Science Series". It covers the practical aspects of two international systems of Library Classification which are mostly used in the libraries in India and are also taught in the schools of library science in India and abroad :—

(1) The Dewey Decimal Classification.

(2) The Colon Classification.

The book consists of 9 chapters, but the second chapter has been divided into sub-chapters.

The first chapter is devoted to the practical aspects of Dewey decimal classification scheme. In this chapter, the study has been limited upto the 18th edition of Dewey decimal classification. I have exhaustively dicusssed the 18th edition of the scheme, including 7 tables of Dewey decimal classification. No doubt Dewey decimal classification is almost enumerative scheme of classification but in the 18th edition 'divide like' formula, has been used so extensively that the scheme has become an almost enumerative synthetic scheme of classification ; e.g.,

593·132041520954 General principles of the enviornmental factors of Genetics of Heliozoa in India.

*593·132 Heliozoa

*Add as instructed under 592—599

04 General principles.

Add to 04 the numbers following 591 in 591·1—591·8 e.g.,

Genetics 0415

At notation 591·15, we find a note as under :—

Add 591·15 the numbers following 591·15 in 581·151—581·159 e.g., mutation 591·1592

Besides we can add the 'Area table' with the help of standard subdivisions for more individualisation, 0954 is indicated India.

In the 18th edition of Dewey decimal classification, the editor himself admits this fact at page 41.

"Segments on L. C. cards with a few exceptions consist of the abridged and unabridged base numbers and the various synthetic

elements that together make up a complete Dewey decimal classification numbers e.g., 658.558·91,658·00973,659·913621. Since these are never more than three segments. The final one may consist of more than one synthetic element as in 658·9136210973".

He again clarify this fact at page 44 of Dewey decimal classification :—

"For example, under surface-active materials (to which the classifier is laid for other aspects of insoluble soaps), these appears 668·1 for technology a repetition in broader form of the 668·125 found under insoluble soaps, as well as the new aspects production economics 338·476681. The entire classification 001—999 may be added to 338·47, hence 338·47+668.1 yields 338.476681 for production economics of surface-active materials. To derive the number for production economics of Insoluble (or copper) soaps it is necessary to extend 338·47 by adding 668·125, the full number for Insoluble soaps, this generates 338·47668125. Moreover, the entry for surface-active materials leads on to manufacturing firms and marketing, and each of these produces more numbers, sub-divisions of which can be completed by adding all or part of 668·125".

Inspite of all this, we can also show the language notation in Dewey decimal classification now e.g.

Works in Panjabi on production economics of Insoluble soaps 338·47668125 (9142)

In this way, now the Dewey decimal classification has become almost enumerative synthetic scheme of classification.

The second chapter is divided into three parts :

(1) Chapter 2
(2) Chapter 2A and
(3) Chapter 2B.

All the three parts of this chapter deals with the practical aspects of the Colon classification. In this Chapter, my study is limited upto 6th edition reprint with amendments 1969 of Colon classification. In the amendment of 6th edition Dr. Ranganathan introduced a new connecting symbol : Single inverted comma (') for time facet.

In second Chapter it has been tried to explain the Basic plan, Systems, Specials, Zones, Facet formula, Fundamental categories, Backward arrow, Forward arrow and Auxiliary schedules of the 6th edition. The Colon classification is really an analytico-synthetic scheme of classification.

The second 'A' Chapter deals with the "Book Number". In this part it has been explained how the Colon classification is able to provide a separate number to each and every document. Its book number formula looks after the books like a mother. It is its 'Book number' formula which provides a separate number to each copy of the book.

The second 'B' Chapter deals with classics. In this chapter it has been tried to explain the third part of the 6th edition reprinted with amendments of Colon classification.

The third chapter deals with the comparative study of Dewey decimal classificatian and Colon classification. In this, it has been discussed the hospitality of array and chain of Dewey decimal classification and Colon classification. It has also been explained the 14 types of devices.

In the fourth chapter, some important questions relating to Dewey decimal classification and Colon classification have been discussed.

The fifth chapter, it has been tried to explain postulational approach method to documents with some examples.

In the sixth chapter, it has been applied the postulational approach to some titles of documents.

The seventh chapter has 77 examples of the analysed titles according to Dewey decimal classification and Colon classification.

The eighth chapter has the definitions of some important disciplines.

The ninth chapter, has some titles for practice to the students. The notation numbers according to Colon classification and Dewey decimal classification are also provided side by side.

From the practical point of view, it has been explained to some extent the theory of Dewey decimal classification and Colon classification. This theory is necessary for the practical aspect of the subject. In my personal view practice sustains theory and paves the way for further progress. To understand the subject, theory and practical application both are essential. One supplements the other and each is indispensable for systematic development of the subject.

It has been intended that this book will prove beneficial and easily intelligible to the students of library science, librarians, and all others interested in the discipline. I welcome the suggestions from all quarters for its improvement. I regret some errors and ommissions etc. in printing.

June, 1975

Om Parkash Uppal

ACKNOWLEDGEMENTS

I acknowledge a deep sense of gratitude the Late Dr. Ranganathan and Dr. Melvil Dewey on whose wosks this book is based, viz.

(1) Colon classification.

(2) Dewey decimal classification.

I sincerely express my gratitude to Shri Sant Ram Bhatia, one of the founders of Journalism of Library Science in India for the encouragement that he has given me.

I sincerely owe a debt of gratitude to my revered teacher Prof. P.N. Kaula, Head, Department of Library Science, Banaras Hindu University, Varanasi for providing me an opportunity to learn this subject in an analytical manner under his able guidance. As I promised in my first book, I am contributing my second work to this series. I appeal to the other friends and disciples of Prof. P. N. Kaula to contribute their works to this series under intimation to me. I shall also try my utmost to contribute more works to this series.

I am very much grateful to my teacher Shri T. P. Saxena, University Librarian, Punjab Agricultural University Library, Ludhiana, not only for his very kindly writing a foreword to this book, but also for initiating me the ABC of Library Science.

I am deeply indebted to Principal Ram Saroop Sharma, Government Polytechnic for Women Jullundur, who has goaded me to complete this book.

My thanks are also due to those authors and publishers whose publications are used in this book for the illustration of various classification problems.

I also thanks my Publisher M/S Sohan Lal Madaan, Patiala who suggests me to write a work on Practical problems of Classification which is needed today.

Lastly I am very much thankful to my wife who helped me to produce this book.

OM PARKASH UPPAL

Dewey Decimal Classification

Melvil Dewey (full name Melville Louis Kossuth Dewey) was born in 1851. At the age of Twenty five years, he had developed and published the first edition of Dewey Decimal Classification Scheme in 1876. At that time it was a pamphlet of 42 pages consisting of 12 pages for preface, 12 pages for tables and 18 pages for Index. Only one thousand copies were published. The table enumerated one thousand subjects. The index has only 2600 entries.

After this, it became popular day by day. The below noted tables show the growth of the edition and expansion of the scheme.

Edition	Date	Preface	Tables	Index	Total	Copies
1	1876	12	12	18	42	1000
2	1885	66	162	86	314	500
3	1888	4	227	185	416	500
4	1891	41	234	191	466	1000
5	1894	,,	235	,,	467	2000
6	1899	,,	260	210	511	7600
7	1911	48	420	324	792	2000
8	1913	,,	462	340	850	2000
9	1915	,,	465	342	856	3000
10	1919	,,	517	374	940	4000
11	1922	61	551	376	988	5000
12	1927	67	683	491	1243	9340
13	1932	75	902	670	1647	9750
14	1942	80	1048	799	1927	15632
15*	1951	55	469	192	716	11200
16	1958	121	1314	1004	2439	31011
17	1965-67	158	1382	940	2480	37139

*15 Rev. edition was also published in 1952.

The 18th edition was published in 1971.

Before the 16th edition, it was in one volume. The 16th edition was published in two volumes. The 17th edition continued this tradition but the 18th edition was published in 3 volumes.

Discription of 16th edition

The first volume contains Editors introduction, Melvil Dewey's introduction, and enumerated tables or schedules. The basic scheme is presented in three summaries. The first summary shows the ten main classes. The second summary has one hundred divisions of main classes. The third summary has approximately one thousand subdivisions of the main classes. Besides these, the whole schedule is futher enumrated in details.

The second volume contains the index part with its explanation, a table of geographic divisions, special table for William Shakespeare, a table for college and university publications, and finally the obsolescent schedules of inorganic and organic chemistry.

The 17th edition was also published in two volumes, one containing the main schedules like 16th edition except auxiliary tables. The second volume contains the index and some auxiliary tables.

Our study will be limited to the 18th edition of D.D.C. Its volume 1 contains life sketch of Melvil Dewey, the Dewey Decimal Classification, (History, ownership, Editorial and Publishing Arrangements), Preface, Editor's Introduction, Glossary, Index to Preface, Editor's Introduction and Glossary, Melvil Dewey's introduction to Edition 12, Seven auxiliary tables :—

1. Standard Subdivisions.
2. Areas tables.
3. Subdivisions of Individual Literatures.
4. Subdivisions of Individual Languages.
5. Racial, Ethnic, National Groups.
6. Languages.
7. Persons.

Except these, the undermentioned things are also found in this volume : Relocation & Discontinued Numbers, Three-Figure Numbers and Three summaries as given in previous editions.

The volume 2 contains enumerated schedules of D.D.C. scheme.

The volume 3 contains Relative Index (use of the Index, Abbreviations used in the Index) Obsolescent Schedules and tables of concordance.

The 18th edition has 2692 pages only.

D.D.C. is an enumerative scheme of classification and it has all such merits and demerits which have an enumerative scheme of classification.

General Features of Enumerative Pattern of Classification Scheme.

(a) It is usually a single in structure.
(b) It lacks connecting symbols and facets.
(c) All possible classes are enumerated.
(d) It is a dictionary of sentences.
(e) It is more or less of helpful nature.
(f) The emphasis is on the relative index.
(g) The size of the schedules are bulky while the possible number of specific subjects that can be individualised are limited.
(h) These may have a pure and less versatile mixed notation.

Basic Plan & Method of Division.

Dewey has grouped the whole universe of knowledge, into 9 equal groups/classes and each class has further divided into ten divisions. Each division has again divided into ten subdivisions.

In practice the notation always consists of at least three digits with zero being used with its normal arithmetical value where required to fill out a number to three digits. Suppose the full notation for main class is 3 which is equal to 300. Thus the notation used to designate the complete span of each main class consists of one hundred three digits class of the system are as under :—

1. Philosophy & related disciplines.
2. Religion.
3. The Social Sciences.
4. Languages.
5. Pure Sciences.
6. Applied Sciences.
7. The Arts.
8. Literature.

9. General Geography & History.
0. Generalities.

For divisions and subdivisions see the second and third Summary of Dewey Decimal Classification Scheme (Pages 450 to 460).

Melvil Dewey has not stopped its expansion upto one thousand and thirty notation numbers. The system can be further divided by adding a decimal point after any set of three digits from 000 to 999. In this way each subdivision has been divided into ten sections and each section has been further divided into ten subsections. This division is going on.

From the tables given above, show that number 1 to 9 represent the topics pertaining to nine main classes of the whole universe of knowledge where as 0 is for such books which relate to more than one or two classes i.e. general Bibiliographies and catalogues, general encyclopedias, general serial publications, journalism etc. etc.

In the same way each group/Class will have 9 divisions and general works of main classes will come under the division represented by 0. For examples :—

500 relates to Pure Sciences. (General works)
510 Mathematics.
520 Astronomy.
530 Physics.
540 Chemistry.
550 Earth Sciences.
560 Paleontology.
570 Life Sciences.
580 Botanical Sciences.
520 Zoological Sciences.

If any book relates to the philosophy and theory of pure science or Mathematics, Astronomy, Physics, Chemistry and life Sciences etc., 501 notation number will be given to it. Similarly if any periodical deals with Physics, Chemistry, Mathematics and life Sciences etc., 505 notation number will be given to it.

Structure of Notation

The D.D.C. notation is a pure notation consisting of Arabic

numerals from 0 and 1 to 9. Thus the total number of notations are only 10. A decimal is used after three figures for convenience. Dewey made it a convention that minimum a set of three figure notation was essential to represent any subject.

Besides, no figure is to be read as an integer, but as a decimal fraction. It is to be read as 1. 2. 1. not as 121. Even the first figure is not to be regarded as integer, but these should be read as 1. 0. 0. Philosophy not 100. Similarly 8. 0. 0. literature not 800. But in practice the initial zero and decimal point are omitted and also omitted is the point as decimal division indicator after every figure except the third digit.

Moreover as I already describes, D.D.C. notation shows subordination or order of division in chain not as a co-ordinate.

Standard Subdivisions

Melvil Dewey introduced such type of divisions first time in 1927 in 12th edition under the heading 'Form divisions.' In the 17th edition and 18th edition, the term 'Form divisions' has been changed to Standard Subdivisions which listed in table 1. These Standard Subdivisions may better be called common Standard Subdivisions because these can be applied to any subject or we can say these standard subdivisions can be commonly used in all subjects. Dr. Ranganathan gives a term common isolate and he says about it. "Isolate represented by the same isolate term and the same isolate number in more or less every class having it." I can say that the standard subdivisions are those minor units in the structure of knowledge which are represented by the same term and by the same number wherever they occur in a scheme of classification. These are given in the 18th edition as under :—

0 1	Philosophy and theory.
0 2	Miscellary.
0 3	Dictionaries, Encyclopedias, Concordances.
0 4	General special.
0 5	Serial publications.
0 6	Organisations.
0 7	Study and teaching.
0 8	Collections.
0 9	Historical and geographical treatment.

0901—0905 Historical periods.

093— 099 Treatment of specific continents, countries localities etc.

Usually each standard subdivision digit is further sub-divided (see table No. 1 of D.D.C. 17th and 18th editions).

We should not forget that these standard subdivisions are never used alone, but may be used as required with any number of the schedules (i.e. class division, subdivision, section and subsection etc.). After the figures indicating the schedules, the position of 0 implies the application of standard subdivision. For example, serial publication of literature 805. Serial publication of a library science 020.5. Study and teaching of Zoology 591.07.

If a note is given in the schedule for the use of the standard subdivisions, it should be followed, for example :—

At notation 611.

Instruction is given for the use of standard subdivisions. Use 001-009 standard subdivisions of human anotomy e.g.

A dictionary of human anotomy 611·003

A journal of human anatomy. 611·005

So here two zeros should be used as connecting symbol for standard subdivisions. Such types of notes should be honoured before using the standard subdivisions.

Times Isolates.

Before the 17th ed. D.D.C. has only a provision of the time isolate in the main classes of history and literature. But in the 17th and 18th ed. the standard subdivision 09 is also used for chronological facets, so that the time aspect of a subject can now be specified to a much larger extent.

For example :

Development of library science in 20th century 020.904

I again remind that the instructions which are given for the use of standard subdivisions in schedule as well as tables i.e. vol. 2 and 1 should be honoured. The method of the use of time isolates and standard subdivisions are the same, except history and literature. In the main class of history and literature D.D.C. has provided the numbers to a specific period. Thus the standard subdivisions for time isolate given in the 17th and 18th editions may be used.

Area Tables

In the 17th and 18th ed., there is a separate 'Area Table's elaborately enumerated which specifies various aspects of the area as regional, zonal, Physiographic, regions, other kinds of terrestrial regions i.e. Hindi speaking region, Muslim dominating region not only of the world but also in a specific country or locality. But there is no provision of such tables before the 17th edition of D.D.C. Upto the 16th edition in D.D.C. the main class history includes the concept of the history of a particular country which were as a space by the 'divide like' provision. But in the 17th edition of geographical subdivision has been recast. Now area tables can be used as required with any number from the schedule with the help of standard subdivisions, but these notation are never used alone.

Table : 3 Subdivisions of Individual Literatures

It is a new table in the 18th edition. It is not found in the previous editions. It should be used only with class 800 (Literature) only. The use of it for the literature class, proves to be very useful.

The main part of this table is a complete list of features, forms and period of literature, in various combinations. In the end we find a brief indication of, how to arrange criticism, biography and the works of single author etc.

Table : 4 Subdivisions of Individual Languages

It is also a new table in the 18th edition and never found in the previous editions. The notations of this table may be added to any starred item in 400 (languages). Usually these isolates are not used with any other class.

Upto the 17th edition the use of language isolate in D.D C. is only applicable in literature for example :—

420 is provided for English language under the main class languages. English literature gets the number 820 under the main class literature with a note that the language schedule provides in languages is also applicable here.

Thus in many previous editions, two classes have special tables of subdivisions of their own. At one time these classes were fully enumerated and had quite elaborate instructions to add sections of notations from one subclass to another subclass. At that time they have been tidied up and you may use the special

subdivisions just as you have become used general subdivisions like other auxiliary schedules.

Table : 5 Racial, Ethnic, National Groups

These isolates are used in the same way as the languages isolates, are used but here these indicate peoples and not to languages. In the earlier editions of D.D.C. we had to use a variety of languages subdivisions, but in 18th edition we will notice that racial, ethnic, national groups are used to specify people.

We should not confuse table 5 with table 6 in D.D.C. 18th edition.

We should note that these isolates are never used alone, but may be used with those numbers from the schedules and other tables to which the classifier is instructed to add 'Racial, Ethnic, National groups.

It is also a new table in the 18th edition and it never found in the previous editions. Besides this schedule is not used as frequently as the standard subdivisions' schedules.

Table : 6 Languages

These isolates are not used as frequently as the standard subdivisions including geographical isolates. These may be added only when the schedules, give explicit permission and instruction.

If we intend to know how to use them, we should look at table 6 i.e. page 407 of Volume 1 of D.D.C.

Table : 7 Persons

The notation of table number 7 are used with those numbers from the schedules and other tables to which the classifier is instructed to add "Persons" notations. A decimal point is always inserted following the third digit of any number thus instructed.

Thus these are not used as frequently as the standard subdivisions including time and geographical isolates etc.

Mnemonic

In D.D.C. we find a large number of digits which have a mnemonic value. The standard subdivisions, area tables and other auxiliary tables are the mnemonic schedules of D.D.C. of 18th edition.

Except these the language and literature schedules are very rich in mnemonics.

For examples :

20 English	420 English Language.
30 German	430 German Language.
40 French	440 French Language.

820 English Literature.
830 German Literature.
840 French Literature.

The notation 1, 2, 3, 4, 5, 6, 7, 8 have a **mnemonic** value through out the literature e. g.

821 English Poetry.
841 French poetry.
891.421 Punjabi poetry.
891.431 Hindi poetry.
891.21 Sanskrit poetry.

Similarly 1, 2, 3, 4, 5, 6 and 7 have a **mnemonic** value through out the language schedule e. g. 3 indicate to dictionary.

423 English Dictionary.
443 French —do—.
491.423 Panjabi —do—.
491.433 Hindi —do—.
491.23 Sanskrit —do—.

How to use D.D.C.

The basic operations for finding a class or division numbers for any group or subject are always the same.

We should first consult the index for required topic, then verify the number given there, in the schedules. This practice usually do, when we will deal with an unfamiliar subjects or topics. If we have learnt the second and third summary of D.D.C. we have a least need to consult the index. In this case we find the index useful, if we use the index to look for specific term rather than a general one. For instance if we want to classify a book entitled 'Dogs' first we should look for that term in the index rather than for a general term like animals and verify it from the schedule. If we try to search 'Dog under the schedules of animal, we will consume more time. But if the book deals with a phase, we should verify it direct from the schedule. For example :—

English poetry.

History of U.K.
Civil Engineering.
Human Physiology.

Thus for phase classification we should consult the schedules first rather than the index. If we have learnt the branches or topics of each and every subject we have a least need to consult the index.

For example :

616.9318 (tetanus) which is a part of 616.931 (Bacillary Disease) which is a part of 616.93 (Bacterial blood Disease) which is a part of 616.9 (other Diseases) which is a part of 616 (Disease) which is a part of 610 (Medicine) which is also a part of 600 (Applied Sciences).

So before, we can fit a work into the Class, we must know exactly what its subject is and from what point of view and in what form that subject is treated, though it is not easy to discover. It is true that sometimes title indicates the subject but it is often misleading. So we should not classify the work to see the title. We should diagnose the book from its contents, chapter heading and marginal notes etc. and then provide the suitable notation.

NOTE : For further details see the examples given in the end of this book.

Abbreviations

D.D.C	=	Dewey Decimal Classification
C.C	=	Colon Classification
ed.	=	edition.
U.K.	=	United Kingdom
U.S.A.	=	United States America

———

2

Colon Classification

Dr. S.R. Ranganathan (Full name Shiyali Ramamrita Ranganathan) was born on 9th August 1892. In the age of thirty two he entered in the library Profession. When he was forty one years old, the Colon Classification was first published in 1933. From 1931 he began to produce book after book and article after article on the various aspects of library science. He was the first National professor of Library Science declared by the Central Government of India.

Upto this time 6 editions and many reprints have been published of Colon Classification. It is becoming popular day by day in India and abroad. The preview of the 7th edition has also been published in Library Science periodical entitled 'Library Science with a Slaint Documentation.'

In the first edition of Colon Classification scheme enumerated the main classes in 27 numbers represented by the 27 capital letters of the Roman alphabets and one Greek Letter. Its novelty was evident in the analysis of each main class, showing the trains of characteristics that occur in it and each train separated by a colon. In its third edition, some minor changes in terminology and sequence were made, but the fourth edition was radically different from all the previous editions. It was based on the postulate of five fundamental categories. In that edition three more linking symbols except colon were introduced, i.e. Comma for personality, Semi-colon for matter and dot for space and time. Besides, a large number of Greek letters were also introduced to represent some newly recognised subjects. Later on, Greek letters were changed by Roman alphabet capitals except Δ. (Delta).

In 1957 the first volume of the 5th edition was published and

in 1960 the 6th edition was published. In 1963 the reprint of 6th edition with amendments was published. In this reprint single inverted comma for time isolate has been introduced.

Though the preview of the 7th edition has been published in professional periodical yet our study is limited upto the reprint of 6th edition.

The following changes have been admitted by Dr. Ranganathan in the preface of 6th edition from its previous editions.

1. The chapters of the Part Rules have been re-arranged and partly re-written.

2. A brief new schedule of chapter 4 is introduced at the end of the old schedule.

3. The Chapter 6 of schedules is new.

The canonical divisions of 'N' Fine Arts have been revised. Some changes in other schedules have also been made. Except these NZ new main class for Literature and language has been introduced.

The whole book is divided into three parts. First part deals with rules on which the construction of the C.C. Class numbers depends. The second part deals with the schedules of Classification with Index. The Third part deals with classes and classics in Indology.

Basic Plan/Structure of Knowledge Classification :

The whole universe of knowledge has been divided into three groups.

1. Natural Sciences. 2. Humanities. 3. Social Sciences.

From these groups, the main classes have been derived. As Dr. Ranganathan was a mathematician and treated the mathematics as a mother of science, so he started the division of knowledge from mathematics. (For further division of main classes see the page 2.4. (Main Classes) of Colon Classification 6th edition reprint 1969). When the knowledge is organised into a number of main classes, the next step is to mark out of each main class the facets which are likely to be presented by subjects falling within it. Sometimes a main class has been divided into canonical classes. For examples see the schedules of the main classes of Mathematics, Physics, Geology etc. Canonical class is not less than the

main class in any way.

Dr. Ranganathan says in a book entitled 'A descriptive account of Colon Classification', 'The history of the evolution of main classes shows that as proliferation increases in the the universe of knowledge, the number of main classes recognised in one age proves insufficient in a later age. Most of the newly emerging Main Classes have differing affiliations to the old Main Classes. On the basis of this affiliations, it is found practicable to group the new Main Classes under the respective old Main Classes.....the new main classes are called canonical classes. The sequence among the canonical classes of a main class can be determined in a consistent way according to some helpful principle.' The canonical classes are treated as 2nd order of array in Colon Classification. Dr. Ranganathan has introduced the systems and specials in many main classes.

Systems :

In the scheme of classification the main class consist of a favourite system. There are many types of systems which are not covered by the main class in Colon Classification. The main class represents a school of thought under different times, different systems developed in the subject at various places in the world, e. g. we get systems, Ayurveda, Siddha, Unani, Homoeopathy, Naturopathy in Medicine and Experimental, Psycho-analytic, Gestalt; Behaviouristic, Individualistic, Refexology, Eidetict, Typological etc. in Psychology.

The schedule of main class for its relative systems are applicable. The facets of the main class are treated to be the facets of the systems. e. g.

Treatment of tuberculosis of lungs L45 : 421 : 6

Treatment of tuberculosis of lungs through Ayurveda LB, 45 : 421 : 6

The digits of the system of the subjects are also provided through choronological device e.g.

XN 16 Syndicalism because it is originated in 1916.

XN 17 Communism because it is originated in 1917.

Thus Colon Classification scheme recognised the system's

facet and has given certain notations for system which are equivalent to Basic Class. For this result, all the documents on a system can be put together.

Specials :

Systems and specials go together. As I already explain system concerns with school of thoughts and it is equivalent to the main class, but the specials are neither equivalent to systems nor main class. These are treated only superior than isolates and facets. (PMEST)

Specials of a Basic class are those isolates under which experts specialise themselves. The whole subject is viewed from the point of view of the field of specialisation by them. Colon Classification has enumerated a list of Specials under different main classes e.g. We find Specials, Small Scale, Large Scale, Private Enterprise, Public utility and Public enterprise in Economics and Embryo, Child, Adolescent, Old age, Female, Tropical Aviation, War and Industrial in Medicines.

Each Special views the subject from its own angle and covers the entire area as a specialist. A specialist of small scale economy will not be more interested in large scale economics. Similarly a specialist of child medicine will not be more interested in "old age" "female" medicine in any way. Besides the canon of helpful sequence demands that all documents on a specialised area should be put together.

Dr. Ranganathan enumerated the specials with the help of the digits from 9A to Z in his Colon Classification. Thus the Roman capital letters were allotted to the Specials in an enumerative manner. The place value of the Specials was fixed after systems before the PMEST. The Specials are usually treated as quasi-basic class.

For examples :

Treatment of Tuberculosis of lungs of female through Ayurveda system. LB, 9F, 45 : 421 : 6

Treatment of Tuberculosis of lungs of a female. L 9F, 45 : 421 : 6

Zones :

Dr. Ranganathan says that the part of the array consisting

of one species of digits should be called a zone. Each zone may be denoted by a symbol using its first digit.

Kinds of Notation of Zones :

Isolate idea are two types :—

1. Common isolates.
2. Special isolates.

Common isolate is again of two types :—

1. Enumerated common isolates.
2. Devised common isolates.

Special isolate is also of two types :—

1. Enumerated special isolates.
2. Devised special isolates.

Thus there are four types of notations of zones are found in Colon Classification : These are as under :—

Zone 1.	Generalia Classes	=Small Roman letters.
Zone 2.	Universe of Knowledge Library Science, Book Science, Journalism etc.	=Arabic numerals.
Zone 3.	Main Classes or Traditional Classes.	=Capital Roman letters.
Zone 4.	Newly emergying methodologies.	=Packet Notation.

From the above statement shows, the structure of notation and the new types of schedules are called zones.

Facet Formula :

In a rigidly faceted scheme for classification, the facets and their sequence are predetermined for all subjects going with a basic class. Colon Classification edition 1 to 3 had given a facet formula for each basic class. The facet formula amounted to predetermining the special isolate facets are eligible or use and compulsorily to be used in the compound subjects. Dr.Ranganathan felt that the predetermined facet formula imposes rigidity in classification and this be sought to remove from edition 4 onwards. Now in Colon Classification, there is no predetermined facet formula for compound subjects going with a basic subject. The object of the facet formula has been to help the classifier to secure automatically the sequence of facets.

Generalised :

The use of symbols enables us to set down a generalised facet formula based on the postulates. Though it is spread over several lines due to exigency of space in the printed page yet it should be read continuously as if it were in one line.

(1 P 1) , (1 P 2) , (1 P 3) , (1 P 4) = first round level personality.
; (1 M 1); (1 M 2); (1 M 3); (1M4) = first round level matter.
: (1 E) = First round energy.
(2 P 1), (2 P 2), (2 P 3), (2 P 4) = 2nd Round level personality.
; (2 M 1); (2 M 2); (2M3); (2 M 3)= 2nd round level matter.
: (2 E) = 2nd round energy.
(3 P 1), (3 P 2), (3 P 3), (3 P 4) = 3rd round level personality.
; (3 M 1); (3 M 2); (3 M 3); (3M4)= 3rd round level matter.
: (3 E) = 3rd round energy.
. (S 1). (S 2) = Space
, (T), (T) = Time.

NOTE : (1) Energy has no level.
(2) Space and Time have no round.

The facet formula is given to each subject does not provide round but have the freedom to take help from the generalised facet formula and create further levels and rounds to the specific formula attached to the subject. It depends upon the intensity of the subject, if the intensity of the subject is great, there are more rounds and levels, but if the intensity of the subject is less, we need less rounds and levels.

If the energy starts, the space and time will not come. The space and time only come in the last as shown in the above statement.

Fundamental Categories

Each subject and activities have categories. These categories have different names in each subject and these can be reduced (postulated) to five fundamental categories and these fundamental categories are common to all subjects. Thus each facet of the subject for classification purpose can be divided on the basis of five fundamental categories

1. Personality. 2. Matter. 3. Energy.
4. Space. 5. Time.

Personality :

Personality facet is the category of first importance, in many of the subjects belonging to any class. Mills says, "The term personality is used to describe those facets of any subject which are generally unique to that subject and which give its essential character or personality." Personality is the first facet in many subjects and it is often experienced that the other facet work as attributes of personality for its further sub-division. What is left of TSEM is personality. Sometimes personality comes alone. For example Crops in Agriculture, Human body in Medicine. Substance in Chemistry. Within the personality facet we find a number of levels into which the whole personality is spread. These are known as levels of personality facets e.g. P 1, P 2, P3, P 4 and so on. In Colon Classification the fundamental category 'Personality' is enumerated.

Matter :

Mills feels that matter is the category of facet which reflect substance or material etc. Dr. Ranganathan recognises material of different things (Personalities) as matter. e.g. if we classify books for the purpose on the manufacture of paper, we should intend some divisions based on the raw materials. This will relate to the concept of matter. Matter facet finds in many subjects falling within main classes of Library Science, Engineering, Sculpture, Painting etc.

Energy :

It covers the problems, actions including methods, functioning, etc. aspects of a main class. Mode of work or approach activities, operations and processes also come under energy. Many main classes have certain units which deals with problem in the subject. In Class, Education, we find many problems like method of teaching. Similarly in Botany, Zoology and Medicine, we find units like Physiology and Pathology which deal with functioning. Dr. Ranganathan identifies energy with activities. When these are common to all, these become common isolates and when these are special to a class, they make its fundamental category 'Energy'. Dr. Ranganathan postulates (reduces) the energy aspects in a main class may manifest itself in different rounds of Energy : e.g. In

Medicine, Pathology or disease is a problem i.e. 1E of the subject, treatment and surgery etc. are also action on diseases and therefore they are 2E of the subject. It is only energy facet which develops personality.

Space :

It is also important in a facet of subject. Dr. Ranganathan takes the geographical area, earth, place, country etc. and manifested it in every subject for indicating local description. e.g. Education in England is of different method than in India. Economics of the U.S.S.R. is quite different than that of the U.S.A.

In Colon Classification, we find a schedule in geographical divisions which we can attach to a subject. In D.D.C. we find the space facet under the class history where the scheme directs 'divide like 940-999' formula upto the 16th edition. We have a provision to use space in every subject in the form divisions also.

Time :

It indicates that the entities under different subjects must go on changing in its structure, meaning, history, development etc., with the progress of time. In Colon Classification we find a 'Chronological table' and this can be applied to any subject requiring time facet.

Auxiliary Schedules

Auxiliary schedules mean those schedules which are given additional schedules in Colon Classification, except main schedule's Colon Classification is an analytic osynthetic Pattern such as Mathematic B, Physics C etc. (See the CC Page 2.4) Dr. Ranganathan defines a common isolate in Prolegomena as under :

"An isolate idea denoted by the same isolate term and represented by the same isolate number, quite irrespective of the compound subject in which it occurs, or the basic subject with which the compound subject goes."

The main classes are further subdivided in Arabic numerals. Except these main classes, five separate schedules have also been provided in the Colon Classification scheme. These are as under :—

1. Anteriorising Common Isolates and Posteriorising Common Isolates.

2. Time Isolates.
3. Space Isolates.
4. Language Isolates.
5. Intra Phase, Intra facet and Intra-Array relations.

Anteriorising Common Isolates.:

These isolates are connected to the host class without any connecting symbol. Documents such as bibliography, dictionary, encyclopedia, periodical, administration report, history, biography etc. of subjects are approached material because such documents are generally read or consulted before entering into the region of the general books on the subject. Thus the approached documents on the subject are placed on the shelves before the general books on the subject. Dr. Ranganathan specifies the anteriorising common isolates by the lower case letters and directs that any class number with a small letter may be attached to it directly without a connecting symbol intervening, shall have precedance over the class number itself.

For Examples :

Encyclopedia of Medical Science Lk

Biography of a doctor Lw

We should know that the ACI (Anteriorising Common isolates) have their own facet formula e.g.

Encyclopedia of Medical Science published in London in 1931 Lk 56, N31

Anteriorising common isolates are of three types :—

1. Anteriorising common isolates applicable before Space. (see C.C. Page 2.5)
   e.g. Herald of Library Science 2m44213,N62
2. Anteriorising common isolates applicable only after space.
   Administrative report r
   Statistics (if periodical) s
   e.g. Administrative report on libraries 2r
3. Anteriorising common isolates applicable after Time. (see of C.C. Page 2.6)
   e.g. First five year plan z44'N56←N51

We should not forget that some Anteriorising common isolates possess their own facet formula and they can be used like main class symbols.

For example a (T)
k (P), (P2)
w (S), (T)

e.g. Who's Who London Wn56,N

Posteriorising Common Isolates

These reduce the extension of the host subjects to which they are applied. These are of two types, falling under Energy and Personality. The connecting links of those isolates have colon and comma respectively as the other energy and personality facets have. Posteriorising common isolates personality facets has its own formula. e.g.

(CI), (P), (P2) : (E)

The posteriorising common isolates are represented by the lower small letters. These are usually added after the host class. For example.

Criticism of Hamlet 0111,2J64,1 : g

Here : ' g ' represents as energy facet.

Observation of the Indian University Libraries in 1972

234.44 N72 : f2

' : f2 ' is represented as energy facet.

Functions of the President of BHULAS 2.44,g,B, 1 : 3

Here CI association is represented by a small letter 'g' which is attached by connected symbol by a comma, because its first alphabetie starts by B, the personality is represented by alphabetical device, by initial capital letter 'B'. P2 and energy has taken from the MC 'V' (History).

Thus individual organisation may be specified by alphabetic numbers, and then by a P2 facet (Council, Committee, Institution and Society etc.) and an 'E' facet (Constitution, Policy function etc.) taken from class V History.

Time Isolates

Time isolates in Colon Classification have come under the auxiliary schedule, we can apply these isolates through out the scheme requiring eluciation choronological characteristic.

The provision of time isolates in Colon Classification is representing in capital Roman letters which stands for a century numbers followed by Arabic numeral and small Roman letters. Small Roman letters are represented to the featured time i.e. these are the signs of days, nights, seasons and meteorological period.

The first Arabic digit stands for a decade and the second digit stands for the particular year.

For example. M 72 'n5'd

M represents to the 19th century i.e. 1800 to 1899.

7 represents to the 7th decade of the the century i.e. 70 to 79.

2 represents to the second year i.e. 2.

n5 represents to the Autumn season.

d represents to night.

Thus M72'n5'd = A night of Autumn of the year 1972.

So Colon Classification is able to provide chronological number standing for century, decade, particular year, season day, night etc.

Besides, it can also provide a chronological number for the continued period with the help of arrow.

Arrow is of two types :— (1) Backward arrrow (2) Forward arrow.

Backward Arrow

Usually books of History deal with different periods. A period has a beginning point of time and an end point of time. To represent a period Dr. Ranganathan introduced the device of writing first the number representing its end points then a backward arrow and lastly the number representing its beginning point. e.g.

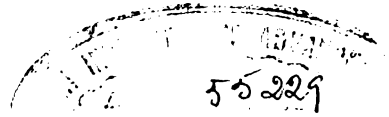
History of India from 1947 to 1972 V44'N72←N47

This method helps to arrange documents having the same end points but different beginning points for their respective periods. e.g.

V44:2'N72←L57 Constitution History of India from 1757 to 1972.

V44:2'N72←M57 Constitution History of India from 1857 to 1972.

V44:2'N72←N47 Constitution History of India from 1947 to 1972.



Forward Arrow

It represents a stretch of period from the present into the future. The documents which take a peep into the future, have their time-focus in the future. In this case, the time of their class numbers must have a corresponding focus indicating the future period. This number is got by writing down the number for the present point of time and adding the forward arrow. e.g.

Future of the Library Science in India.	2.44'N72→
Future of Indian Economy.	X.44'N72→
Future of Indian democracy.	W6.44'N72→
Future of all India Broad-casting.	D65,43.44'N72→

In Colon Classification, chronological number is used to differentiate Authors, Biographers and many other works etc. These can also be used for providing different theories i.e. systems and specials in the main classes. e.g.

For Author

0111,2J64x Complete works of Shakespeare.
015,1D40 : g Criticism of the poetry of Kalidasa.

Biographies

V44y7,M69 Biography of Mahatma Gandhi.

Reference Works

a44,N57 National bibliography of India.
k56,L68 Encyclopedia of Britannica.

Space Isolates

Space isolates are the concept which denote a particular community or country. In Colon Classification, Dr. Ranganathan has provided a separate schedule of space isolate which is a comprehensive statement of ideas to represent geographical entities. Chapter 4 of Colon Classification is a schedule of space isolates. In it, the author used the Arabic numerals to represent the space isolates to the world as well as individual zones and countries etc. The small Roman letters are also used to represent the physical features or Physicographical features which are given in the Annexure of Colon Classification reprint 1969.

The author of Colon Classification has given equal considera-

tion to represent all the countries, of the world. He does not violate the canon of enumeration and the canon of exhaustiveness. The Colon Classification tries to honour the canon of spatial contiguity but it violates the canon of reticence in space schedule.

For example

Suppose, today England is our favourite country, but tomorrow Russia can also become our favourite country. Thus the use of the digit number of favourite country is a quite violation of the canon of reticence. Homonym isolates and synonymous number are found too much in Dewey Decimal Classification, while Colon Classification cover all the parts of the world infiliation. It avoids to use the homonym isolates and synonymous number.

The concept of the countries which has been effected by the religion, customs and languages etc. are also classified in it.

For example

Muslim countries of the world	1(Q7)
English speaking countries in the world	1(P111)
Middle east countries	19C-A
Buddhist countries	1(Q4)
Democratic countries	1(W6)
Communist countries	1(W691)

The number of world organisations can also be created with the help of time isolates e.g.

United Nations	1 N4
NATO countries	16 N
Commonwealth of Nations	1 N48

Besides all this, in Colon Classification a geographical index has been provided to arrange in an alphabetical sequence.

Language Isolates

These are provided in an auxiliary schedule under the name of language isolates. These can be inserted in each and every subject if needed.

In this schedule, the first section is used for families of languages and other continental languages as shown below :—

P 1 Indo-European languages.

P 2 Semitic languages.

P 3 Dravidian languages.

P 4 Other Asiatic languages.
P 5 Other European Languages.
P 6 Other African Languages.
P 7 Other American Languages.
P 8 Other Australian Languages.
P 9 Other Oceanic Languages.

The second sector is used for the classic and other oceanic languages as shown below :—

P11 Teutonic language.
P12 Latin language.
P13 Greek language.
P14 Slavonic language.
P15 Sanskrit language.
P16 Iranian language.

The oceanic languages can be created with the help of Geographical device. e.g.

P 94 Other oceanic languages in Asia.
P 95 Other oceanic languages in Europe.
P 96 Other oceanic languages in Africa.
P 97 Other oceanic languages in America.
P 98 Other oceanic languages in Australia.
P 99 Artifical languages.

It is true that languages of many countries have not found in the language schedules given in Colon Classification 6th edition reprint 1969 at page 2.26, but there is a provision to create numbers by geographical device. e.g. There is no number for Japanese language but we can create it with the help of geographical device i.e. P 42.

Thus Colon Classification accommodates each and every language and it has given a respectable place to each language. Except all these, Colon Classification has also provided numbers to artifical languages through chronological device. e.g.

Esperanto 99M87 because the Esperanto language has been invented in 1887.

In the rule portion of language isolates at page 1.54 of C.C. reprint 1969 is also written as under :—

"The digit '—' (dash) may be used for the Favoured language of the library in the language Facet of a class number."

Using the dash for favourite language, the favourite language will come first. It is a local variation.

Phase Relation :

In the Colon Classification, a deep analysis of subjects are found to evolve the concepts of simple, compound and complex subjects. This analysis may be likened to the division that a chemist makes of substances into elements, compounds and mixtures.

Phase relation is a combination of two words, Phase and relation. The first constitutent part is called phase and one constitutent part 'connection' to another constitutent part is called relation. In other words the phase relation means, any type of connection of one phase to another phase. It may be a subject relation, facet relation or array relation.

Dr. Ranganathan has found only five types of relations. Vickery says that the number of possible phase relations in scientific indexing are many. Perry, Kent, Berry, Andrews, Newman and some others have gone deep into the question of types of relations. But their field of interest are depth classification and mechanical selection. Here I shall discuss only those types of relations which Dr. Ranganathan has indentified in Colon Classification.

These are as under :—

1. General relation.
2. Bias relation.
3. Comparison relation.
4. Difference relation.
5. Influence relation.

Connecting symbol of these types of relations in Colon Classification is zero i.e. O. A specific subject may have any one of the above mentioned relations. But these types of relations are three in number :

1. Intra-subject phase relation : Relation between two or more basic classes, with or without their facets.
2. Intra-facet phase relation : Relation between two or more facets of a basic class.
3. Intra-Array phase relation : Relations between two or more sub-isolates of a facet.

Intra Subject Phase Relation

A complex subject or class is said to be two phased, when it brings into relation, of two main classes or any of their sub-classes with or without facet. One of them is the actual subject of exposition and thus primary phase, the other is not the subject exposition and thus a secondary phase. The secondary phase indicates a subject which comes in relation with the primary phase.

The schedule of the digits assigned to different subject phase relation in Colon Classification is as under :—

(a) General relation.
(b) Bias relation.
(c) Comparison relation.
(d) Difference relation.
(e) Influence relation.

General relation

It denotes a more or less all comprehensive relation, which is not merely any one of the other relations.

The rule regarding the sequence of the two classes forming a subject of general phase relation, Dr. Ranganathan defines as under :—

"The consitituent whose class Number is of smaller ordinal value than that of the other, is to be used as the First Phase. e.g.

Relation between Mathematics and Physics B0aC

In the above example, we have made Mathematics, the First Phase as its class number 'B' is of smaller ordinal value than the Class number 'C' stands for the other phase, viz. Physics. The second phase is called relation phase in this case.

Bias relation

It indicates that the exposition of the First Phase is biased towards the second phase. This means that the subject is treated in such a way as would suit the needs of a specialist in the subject which forms the second phase. In this case the second phase is called 'Bias Phase'. e.g.

Mathematics for doctors B0bL
Mathematics for engineers B0bD

The general text books of Mathematics will have the class number 'B'. But it is likely that some of these books are written especially for the use of doctors and engineers etc. In the case of such books the Class Number 'B' may be added to so as to read B0bL, B0bD etc., respectively. If such books are not differentiated by the Bias device they will get intermigled with the ordinary test books in Mathematics and when a doctor or an engineer comes and asks for Mathematical books the librarian cannot readily search out the books suited to him.

Similarly the general books on Chemistry have the class number 'E'. But some of them are written for use of doctors, engineers Physicists etc. It will be convenient if such books can be differentiated by adding to their class numbers so as to read E0bL, E0bD, E0bC, etc.

Comparison Phase

Comparison phase relation is a phase relation of a more or less comprehensive or non-descriptive kind between the two phases. It is used when comparison is made between two subjects. The subject whose class number is earlier ordinal number, is to be treated as the first phase. The second phase is called the comparison phase. e.g.

Mathematics compared to Chemistry.
B0cE

Difference Phase

Difference phase relation is used when the difference between two subjects is expounded, the subject whose class number is the earlier ordinal number, is to be treated as the first phase. The second phase is classed difference phase. e.g.

Difference between Mathematics and Physics. B0dC

Influencing Phase

Influence phase relation is used when the expcsition of phase is influenced by phase 2. It may also be indicated that the subject forming phase 1 is influenced by the subject forming phase 2. In other words, influence subject should come first and influensive subject will come later on. e.g.

Influence of Mathematics on Physics C0gB

Intra-facet Phase Relatoins

In Colon Classification we find another type of relations between two isolates in one and the same facet of a class or we can say, when the relations exist between the isolates of the same facet, it is called Intra-facet phase relations. These are of five types like intra subject phase relations. The class number of an intra facet in a specific subject is got by inserting between the two isolate numbers of the constituent divisions, the connecting symbol of these isolates are zero and an appropriate alphabetic (Roman) representing intra facet phase relation. The schedule of the digits (Roman alphabetic) assigned to various intra facet relations with examples are as under :—

j	General	Trends in city library and univesity library	2220 j34
k	Bias	Physiological anatomy	L : 20k34
m	Comparison	City library compared to university library	2220m34
n	Difference	Difference between city library and university library	2220n34

In the above class numbers the digits 22 in the isolate number stands for city library (except Bias i. e. Physiological anatomy) and the digits 34 after small j, m, n stand for university library.

r	Influence	Influence of city library on university library	2340r22

In the above class number, the isolate number 34 stands for university library and the isolate number 22 stands for city library. The number for university library is written first on the basis of the rule for influencing.

Intra Array Phase Relations

In Colon Classification, we find the third type of relations between the sub-isolates under a facet in a specific subject, which is called intra-array phase relations.

The difference between the Intra-facet in a specific subject and the intra-array in a specific subject are as under :—

The intra-facet in a specific subject, any two isolate numbers which do not form constituent divisions of a single array, but are

constituent divisions of a facet come into relation with each others. The intra-array in a specific subject, any two isolate numbers which form the constituent divisions of a single array come into relation with each other.

Intra array phase relations are also of five types. The schedule of the digits (Roman alphabetics) assigned to the various intra array phase relations are as under :—

t General
u Bias
v Comparison
w Difference
y Influencing

The class number of intra array in a specific subject is got by inserting between the two isolate numbers of the constituent divisions, the connecting symbol is a zero and an appropriate digit (i.e. Roman alphabetic) representing intra array phase relations. e. g.

Functions of Lok Sabha and Rajya Sabha in India
V44, 310t2 : 3

In India functions of Lok Sabha for Rajya Sabha.
V44, 310u2 : 3

Comparison between the functions of Lok Sabha and Rajya Sabha in India V44, 310v2 : 3

Difference between the functions of Lok Sabha and Rajya Sabha in India V44, 310w2 : 3

In the above class numbers the digit 1, in the isolate number 31 stands for Lok Sabha and the digit 2 after small t, u, v, w stands for Rajya Sabha. It is a constituent division of the second order of array formed on the basis of Legislative characteristics applied to the isolate Legislature represented by the digit 3 in the first order array of constitutional organ facet. The digit 3 in the primary isolate array relation number is retained to indicate that both the isolate number showing isolate array relation are derived from it.

Influence of the functions of Lok Sabha on Rajya Sabha
V44, 320y1 : 3

In the above class number, the digit 32 stands for Rajya

Sabha and digit 31 stands for Lok Sabha. The number for Rajya Sabha is written first on the basis of the rule for influencing.

Index

In the second part of Colon Classification, we find the indexes at four places :—

1. Alphabetical index to the schedules of space isolates.
2. Alphabetical index of the Personality isolates in Botany.
3. Alphabetical index of the Personality isolates in Zoology.

These indexes are given immediately after the respective schedules. The schedules of these main classes are long and relatively unfamiliar. Dr. Ranganathan says about these indexes is as under :—

"Experience has shown that the index is often consulted for the isolates in these schedules only. It is a help to have these schedules and their indexes in justaposition."

In these indexes isolate numbers are given against each isolate term.

4. This is an alphabetical index to the fundamental constituent terms in the schedules of classification contained in part 2 except schedules of space, Botany and Zoology.

The index to the Colon Classification is very economic. It does not repeat the schedules, but simply collocates the distributed relatives. This index is merely a dictionary of isolate terms used in the schedules, giving their classificatory meaning that is, location as foci in facets of main classes.

Dr. Ranganathan has also explained how to use the Colon Classification's index in the 6th edition reprint 1967 at page 2.124. He says, "The number given against an entry requires some explanation. The first letter or digit represents a Common isolate if it is a lower case and a Main Class if it is a numberal or a capital letter. If the number begins with a capital letter followed by a numbral, it is the number of a Canonical Class."

The names of Main Class/Canonical Class and facet etc. are given in contractions. e.g.

1. Coal F(E), 551. H2(P), 35403. X(P), 8(F551).

This means that the concept coal will be found as focus number 551 in the energy facet of main class 'F', the focus number 35403 in the 'P' facet of canonical class 'H2' and focus number 8(F 551) in the 'P' facet of main class 'X'.

2. Hand G(P), K(P2), L(P), 167.

This means that the concept 'Hand' will be found as focus number 167 in the 'P' facet of main class 'G' in the 'P2' facet of main class 'K' and the 'P' facet of main class 'L'.

3. Plan (ACI. Atf.), t5. NA(E), 3.

This means 'Plan' has the Common Isolate number in the table Anteriorising Common Isolates and it is to be used after Time facet.

(*For further details see page 2.124-5 of C.C.*)

This account of Colon Classification has been highly simplified. In essence the method is indeed simple, but there are complications which to some extent arise from the use of the five fundamental categories and their extensions through rounds and levels.

———

Abbreviations

D.D.C.= Demey decimal Classificatlon.
C.C. =Colon Classification.
A.C.I =Anteriorising Common Isolates.
P.C.I =Posteriorising Common Isolares.

2A

Book Number

The canon of book number has been defined by Dr. Ranganathan as under :—

"A scheme of book classification should be provided with a scheme of book number to individualise the documents having the same class of knowledge as their ultimate class."

Thus the book number helps in individualising the books of the same topic and same author. If the book number individualise the book on these patterns, it should be treated as 'good book number scheme.'

1. Different copies of the same book.
2. Different editions of the same book.
3. Different volumes of a multi-volumed book.
4. Books by different authors/different years of publications.
5. Different languages of the same subject.

Colon Classification book number formula satisfy these things. It prescribes a facet formula which reads as shown below :—

[L] [F] [Y] [A] . [V] — [S] ; [C] : [Cr] [At]

Language Number

It is got by translating the name of the language in which the book is written into appropriate symbols in accordance with language schedule provided by the scheme of Colon Classification at Chapter 5.

For examples	Class No.	Book No.
English books on Chemistry	E	111
Punjabi books on Chemistry	E	153
Hindi books on Chemistry	E	152

Form Number

We find books written in different forms of exposition in different languages. The form number is got by translating the

name of the form of exposition into appropriate symbols in accordance with the form schedule chapter 02 in Colon Classification 6th edition.

For examples	Class No.	Book No.
Lectures on Physics in English language	E	111p1
,, ,, ,, ,, Panjabi ,,	E	153p1
,, ,, ,, ,, Hindi ,,	E	152p1

Year Number

It is a most important facet of book number formula. It is to be built with the help of the time schedule given at page 1.13 and chapter 3 of Part 1 and 2 of the Colon Classification. The main point of the book number is to arrange books according to the year of publication. The year number helps us to arrange books on a specific subject according to the year of publication which is also found suitable and useful to the readers. In most of the libraries normally the book number will start with the year of publication. In this way the book number will not be so lengthy as it appears from the book number formula.

Edition Number

Dr. Ranganathan suggests in 'prolegomena' that the number of publication of the successive editions may be used as if they were copy number. It should be used in the test book collections, years books etc. in academic libraries. If we do not use it, the successive editions of a book will be scattered among other books according to their years of publication. Inspite of this, there are changes from edition to edition, the successive editions of a book should be treated as copies with the modification that the copy number may be made of the translation of the years of publication of the different editions. e.g.

Text book of Chemistry	First edition	1937	N 37
—do—	Second -do-	1940	N 37 ; N 40
—do—	Third -do-	1944	N 37 ; N 44
—do—	Fourth -do-	1947	N 37 ; N 47
—do—	12th -do-	1972	N 37 ; N 72

Accession Part

Accession part of the book number is another facet of the

book number formula. It is not a part of the Accession or serial number which is written in the accession register. When more than one book are published on a specific subject in a particular year and these are purchased in the library, these books will get the same number according to the year of publication. In these cases the Accession number will individualise them. Suppose four books published in 1974 have the same class number (i.e. related to one topic). The first book will get its No. N74 the second book will get its number N741 the third book will get its number N742 and the 4th book will get its number N743.

Volume Number

If a work is in more than one volume, it will be desirable to design the work number of the volume in such a way that these are all brought together. Dr. Ranganathan defines it in Colon Classification at page 1.14 of 6th edition as under :—

"A set of volumes is to be deemed to be indivisible and to form a Multi-Volumed Book if one or more of the following conditions hold good :

1. The set possesses a common index.
2. The same sequence pagination is continued through out all the volumes of the set.
3. The subject matter is so distributed among the volumes of the set that it is not helpful to treat each volume as a separate book."

The volume number is employed for setting together all the volumes of a multi-volumed book. Dr. Ranganathan says about the up keep and arrangement as under :—

"In the case of an indivisible set of volumes, the volumes of the set are to be individualised by putting a dot after the year number, or the Accession Part of the book number, as the case may be, and putting the number of the volume in Indo-Arabic dot numerals after the dot. The digit or digits thus added after the may be termed the volume number. If the volume number consists of more than one digit it should be read as an integer and not as a decimal fraction." In this way the volumes are kept in the proper sequence.

Supplement

The book number of the supplementary volume is taken from the book itself. A hypen is the connecting symbol in this case. Thus the digit added after the hypen may be called the supplementary number. Supplementary volume number should be written in Indo-Arabic numerals.

Copy Number

It is a very helpful for individualising the copies of the same book and also keeping them together. The copy number is specified serially beginning with one for the second copy. The connecting symbol is a semi-colons.

For example	Third copy	N 73 ; 2
	Hundredth copy	N 73 ; 99

If the book number of the first copy is N742 the other copies will be as follows :—

Third copy	N 742 ; 2
Hundredth copy	N 742 ; 99

If the book number of the first copy is N 742.5-1 the other copies will be as follows :—

Third copy	N 742.5-1 ; 2
Hundredth copy	N 742.5-1 ; 99

Criticism Number

If the book is not a classic and is therefore not made a class by itself, but another book is written on it, or any other author evaluates the book, the evaluation/criticism is represented by : g. Thus the connecting symbol for the criticism is colon.

Accession Part of the Criticism Number

The book number of the second or third criticism work number is added after criticism number. It is written in Arabic numerals.

e.g. Second criticism of the book N 742.5—1;2:g2

Conclusion

After going through the book number formula, it is usually seen that the main point of the book number is to arrange books according to the year of publication. It is also helpful to the scholars and readers. Due to these considerations, many librarians, start the book number from the facet 'Y' i.e. the year of publication. In this way the book number will not be lengthy as it seems

from the book number formula.

Collection Number

All the books are not arranged in a single Hall or Section of a library. Books are arranged in different rooms and departments etc. e.g. Text book section, Reading room, Periodical section, Physics department, Law department etc. Besides, a library has different types of collections. It may not be helpful to keep all these collections in a single sequence strictly according to their class numbers. e.g. Undersized books, Oversized books, abnormal books. Similarly worn out books, rare books and secondary collections may also be arranged in separate sequence.

All these sequences are very helpful if the books are arranged in broken order. All types of libraries have adopted the broken order system, because each library has different types of books.

The below noted illustrations are necessary to indicate the collections both in the books itself and in the catalogue and other records.

Text book collection	T C	
Reading Room Collection	R R	
Periodical Collection	P C	
Physics department Collection	C D	
Law department Collection	Z D	
Library Science Department Collection	2 D	
Undersized books	N 74	(Under line book number)
Oversized books	$\overline{\text{N 74}}$	(Over line book number)
Abnormal books	$\underline{\overline{\text{N 74}}}$	(Under line and over line book number)
Worn Out books	(N 74)	(Encircle book number)
Rare books	R B	
Secondary collection	S C	

We see that Colon Classification is provided a schedule of collection numbers to individualise the various collections of special documents to be formed to facilitate their use by readers. It is proved to be very helpful in University libraries, State libraries, College libraries, Business libraries etc.

2—B
Classic

The Part 3 of Colon Classification 6th edition deals with schedules of classics and sacred books with special names and its index. Dr. Ranganathan defines the classic in the 'prolegomena' as under :—

"Work (other than a sacred work or a work of literature) expounding some specialised subject, usually having embodiments in several versions, adaptations, and translations, inspiring other works on itself, and getting copied out and/or brought out in print even long after its origin. A classic is largely of intuitive origin and it is charged with the personality of its author."

He further says, "Perhaps Colon Classification goes farthest in giving a special treatment to books and other documents clustering round a classic. For this purpose it employs the classic Device."

He also defines the classic device in the Colon Classification 6th edition of chapter 7 as under :—

"It is employed for bringing together the different editions of each of its commentaries, the different editions of each of the sub-commentaries of each of its commentaries, and so on, and of securing that the group of sub-commentaries of a commentary is in justaposition to the commentary, that the groups of commentaries of a classic is in justaposition to the classic, and that the group formed of each classic and its associated commentaries is in justaposition to the groups of the other classics of the same class."

Similarly canon of classic is enunciated as such, "A scheme of book classification should have a device to bring together all the editions, translation and adaptations of a classic and next to them all the editions, etc. of the different commentaries on it, the editions etc. of a particular commentary all coming together,

and next to each commentary all the editions, etc. of the commentaries on itself in a similar manner (which are commentaries of the second order), and so on."

Thus classics in Colon Classification deals in such a way so that the classic and their edition, translation, adaptation, commentaries and sub-commentaries should come at one place. Reader will find the new edition, translation, adaptation, commentaries and sub-commentaries etc. on the back of the classic book. In language and literature these are dealt with as under :—

For examples

1. P =Linguistics.
   P 15 =Sanskrit language.
   P 15, C =In which stage the work was written.
   P 15, Cx =Common isolate indicating that a work is a classical work.
   P 15,Cx1, =Panini who was the first Sanskrit grammarian.
   P 15, Cx1, 1 =It is found to be first work of Panini i.e. Panini : Astadhyayi.
2. 0 =Literature.
   0 15 =Sanskrit literature.
   0 15 : g =Criticism of Sanskrit literature.
   0 15 : gx =Common isolate indicating that a work is a classical work.
   0 15 : gxJ 50 =In which age the author was born i.e. Appaya Diksita.
   0 15 : gxJ50 1=First work of Appaya Diksita i.e. Kuvalyanada.
3. **In other subjects**
   R 625 =Nyaya.
   R 625x =Common isolate indicating that work is a classical work.
   R 625x 1, 1 =Gautama Nyaya-Sutra.

In view of these examples we will reach the conclusion that the lower case 'x' in other subjects is the symbol for classics as a

class. There are certain facets employed to further sub-divide the classical class. The facet formula is as under :—

x (P1), (P2), (P3), (P4).

x =Symbol for classic.

p1 =Classical author to be got by the Favoured category device i.e. chronological number of the author who wrote the classical work.

p2 =Classical work to be got like the p4 of main class literature i.e. chronological number of the work of the author.

p3 =Commentary number to be got by Favoured category device i.e. chronological number of the classical commentary on the classical author's work.

p4 =Sub-commentary number (if any) to be got by the Favoured category device i.e. chronological number on the previous commentary of the classical work.

By this formula in Colon Classification scheme, the classic becomes a class by itself and the helpful sequence between the document is possible. If this formula is ignored, the relevent documents on a classical work (i.e. commentary, adaptation, sub-commentary etc.) will be scattered at different places in the subject.

———

3

Comparative Study of Dewey Decimal Classification and Colon Classification 6th ed. rev.

Array : An array is a family of co-ordinate classes or of equal rank. At every stage in the process of division arrays are formed. There is an array of co-ordinate classes at the level of the three stages in Dewey Decimal Classification and Colon Classification.

In Dewey Decimal Classification, first summary is a first order of array. Second summary is a second order of array and third summary is a third order of array and so on.

In Colon Classification, group of classes i.e. Natural Sciences, Humanities and Social Sciences are co-ordinate with each other or of equal rank. Basic Classes are another order of array or co-ordinate status. Physics, Chemistry, Engineering, Political Science, Economics, History etc. are co-ordinate subjects among themselves or of equal rank. Canonical classes are the third order of array. The PMEST is the fourth order of array or of equal rank. Similarly Fundamental categories are futher divided into isolates facets and isolate facets are also divided into sub-isolate facets. Isolate facets among isolate facets are co-ordinate and sub-isolates among sub-isolates are also co-ordinate in rank and status.

Dr. Ranganathan defines an array as under :—

"An array is the sequence of the classes of a universe derived from it on the basis of a single characteristic and arranged among themselves according to their ranks."

Thus array is a row of topics which are co-ordinate in

importance or of equal rank.

Chain : The meaning of chain in the classification of knowledge stands for a sequence of classes among themselves, where the second class in the chain is derived from the first class and the third class in the chain is derived from the second class and so on. In other words, chain is a series of terms in successive sub-ordination. Dr. Ranganathan defines the term chain as under :—

"A chain is a sequence of classes made up of any given class which forms the last link of the chain, its immediate universe, its immediate universe of the second remove, of the third remove, etc. A chain may be arrested at any stage short of the original concerned."

For example, Mathematics is a basic class, Algebra, Arithematic, Geometry etc. are its sub-ordinates. So this is the chain of Mathematics. Similarly isolate facet and sub-isolate facets are in chain, because isolate facet are the sub-division of PMEST and sub-isolates are the chain of isolate facets.

For example

D.D.C.	C.C.
500=Pure Science.	B=Mathematics.
510=Mathematics.	B2=Algebra.
512=Algebra.	B25=Higher Algebra.
512.8=Abstract Algebra.	B252=Binary.
512.86=Theory of group linear transformation.	

Hospitality in Array and Chain

Hospitality means accommodate or welcome to everything. So hospitality in array and chain means to accommodate co-ordinate and subordinate status. The field of knowledge is increased very much. It is still growing and is bound to develop in future. All topics of knowledge are accommodated in arrays and chain of different orders. Thus the good classification scheme demands hospitality in array and chain. Hospitality of the Dewey Decimal Classification and Colon Classification notation in array and chain is infinite. In both the schemes, any number of new subjects can be accommodated at any point either in co-ordinate relation or in sub-ordinate relation.

In Dewey Decimal Classification, the universe of knowledge has been divided into nine Arabic numerals, but subjects are more than nine, so Melvil Dewey takes help from Decimal system to hospitate the co-ordinate and subordinate subjects e.g. 621.3 and 621.4 are the numbers of two co-ordinate subjects, we can insert infinite number of subjects between them, because, we can expand 621.3 by adding to it any digit and to any extent, yet no number thus formed will clash with 621.4. Similarly, suppose 621.31 and 621.32 are the numbers of two subjects in chain in subordinate relation, we can insert infinite numbers of subjects between them, because, we can expand 621.31 by adding to it any digit and to any extent, yet all the numbers so formed will be in between 621.31 and 621.32. In this way Dewey Decimal Classification maintains the canon of expressiveness, but strictly upto ten divisions.

In Colon Classification, the universe of knowledge has been divided into so many Roman letters and Arabic numerals. Besides there are many compound Roman letters which have a zero value. Thus in Colon Classification, we can hospitate new co-ordinate subjects to allot these compound Roman letters. e.g. Mining has become a full subject and Colon Classification has accommodated to provide a compound Roman Alphabetics HZ. Dewey Decimal Classification scheme has no such provision.

Similarly Colon Classification notation secures a large hospitality in chain with a decimal principle, facet device, phase device and super-imposition device e.g. Curriculum in secondary Education. We can hospitate such specific subjects in Colon Classification scheme providing the notation T2 : 2 but in Dewey Decimal Classification scheme we have bound to give either secondary education notation or curriculum. Thus the hospitality in array and in chain is little in Dewey Decimal Classification scheme instead of Colon Classification scheme.

Hospitality in array and in chain has been achieved by a number of stated devices in Colon Classification scheme.

Array

A. Interpolation Device.

B. Sector Device.
C. Chronological Device.
D. Alphabetical Arrangement.
E. Common Isolate Device.
F. Zone Device.
G. Subject Device.

Chain

H. Gap Device.
I. Decimal Fraction Device.
J. Facet Device.
K. Inter-Subject Phase Relation Device.
L. Intra-facet Phase Relation Device.
M. Intra-Array Phase Relation Device.
N. Super-imposition Device.

A. Interpolation Device

Interpolation is a combination of two words Inter+polation. Inter means between and polation means way. Thus interpolation means between way. Interpolation device increases efficiency of notation of the Colon Classification to implement the hospitality in array mostly at the level of main classes. Dr. Ranganathan says about this device is as under :—"The interpolation device consists in interpolating between two consecutive digits of one species a two digited number of the same species for accommodating a new partially comprehensive (MC) or an altogether new (MC) and defining it as co-ordinate with one digited number."

It has been developed from the concept of emptying digit. In Colon Classification scheme digit T to Z are designated emptying digits. A digit which has a similar meaning in another language is inserted between two digits of a particular species already used in notation. The notation value of new notation is fixed at the relevant position. e.g.

H retains its ordinal value Geology and I retains its ordinal value Botany, but if we attach Z with H, the HZ has another ordinal value. In this way we can accommodate a large number of newly developed subjects as Dr. Ranganathan has

already accommodated. Mining to allot the alphabetics HZ. This device is not found in Dewey Decimal Classification.

B. Sector Device

Dr. Ranganathan has introduced this device in the scheme of Colon Classification through decimal fraction. He declared the digit 9 as an empty digit i.e. the digit itself has no meaning but when joined with digit 1 to 8 becomes meaningful. In other words if the digit 9 is joined with any of the digit from 1 to 8 e.g. 91 which is equal to 8+1. Similarly 92 is equal to 8+2. Thus the focus 17 will be read as 991 which is equal to 8+8+1. In this way sector device which is previously known as Octave device provides for an infinite numbers of co-ordinate classes in Colon Classification.

According to sector device 9 is not used ordinarily to individualise any class. The array classes are not only numbered with 1 to 8 Indo-Arabic numerals. The sector 1 to 8 is called the first sector. In second sector only 91 to 98 numbers are used. The digits 991 to 998 is called the third sector. In some main classes like economics, Dr. Ranganathan has used the digit 9 and there it has a meaning but mostly he tries to avoid to use this digit.

In Dewey Decimal Classification the digit 9 stands for 'others' in most cases. e.g.

In second order of Array

290 Other religions.

490 Other languages.

890 Literatures of other languages.

990 General history of other areas.

In third order of Array

About twenty six numbers come in this category. e.g.

039, 059, 079, 089, 149, 159, 179, 199, 289, 299, 319, 369, 439, 479, 489, 499, 559, 629, 679, 839, 899, 919, 939, 949, 989, 999.

299.1 Other Indo-European People.
299.2 Semites.
299.3 North Africans.
299.4 People of North and West Asian origin or Situation and Dravidians.
299.5 East and Southeast Asian origin.

Thus the 'other device' in Dewey Decimal Classification is the same as the sector device in Colon Classification.

Declaring the digit 9 as an empty digit the Colon Classification has become very powerful to form or accommodate newly developed co-ordinate divisions of main classes and also helps to make a sector. By this device, the number 1,91,991 etc. have become co-ordinate, but number 1,11,111 etc. have become subordinate due to the use of decimal device.

Declaring the digits 7, 8, 9 as vacant digits except in English literature and History of U. S. A. etc. in chronological divisions, the Dewey Decimal Classification has become more powerful to accommodate the more chronological classes in literature and history.

C. Chronological Device

Chronological device has also increased the hospitality in array in Colon Classification. The schedule of chronological divisions is given at page 2.7 in Colon Classification 6th edition with amendments and at page 120 of Dewey Decimal Classification Part 1, 18th edition under the Heading : Historical periods. In Colon Classification, this device is illustrated at many places. e.g.

1. In the individualisation of special forms and functions in Mathematics. e.g.

Theory of numbers	B18	
Diophantine equation	B13,3	(invented in 4th century A.D. by Diophantus).
Pell's equation	B13,3K	(The letter K representing the 17th century because Pells flourished this equation device in 17th century).

Similary a note in Mathematics at notation B239, B 392, B 2A etc. are found in Colon Classification to accommodate the more co-ordinate classes.

As I already told that the chronological divisions are found in Dewey Decimal Classification instead of chronological device, but Dewey Decimal Classification does not follow these divisions strictly e.g. at page 865 in Dewey Decimal Classification 18th edition, we find a note at notation 512.9

Use 512.9001 512.9009 for standard subdivision.

But notation 512.94 indicate to the theory of equation, equations, and system of equation, radical theory.

From the above example it is true that Dewey Decimal Classification does not follow the chronological device, but it is coming nearer to adopt this device, because, in the previous edition of Dewey Decimal Classification, we never found the chronological divisions in standard subdivisions/form divisions etc.

2. Fixing the author number in literature : personality number in biography and period number in history :

Chronological device provides infinite hospitality in array in literature, history, biography etc. in Colon Classification. In case of an author in literature or personality in biography or the period number in history, the isolates are worked out, on the basis of the year of birth of an author in literature, on the basis of the year of birth of the biographer/autobiographer etc. and on the basis of the period of kingdom in history e.g.

(a) Tempest 0111, 2J64, 1
Godan 0152, 3M69, 1

J64 and M69 isolates are indicating the date of birth of Shakespeare and Munshi Prem Chand respectively. Shakespeare was born in 1564 and Prem Chand was born in 1869.

(b) Biograpby of Subash Chandra Bose V44y7M99
Life of Ramana Rishi △2y7M79

M99 and M79 are indicating the date of birth of Shri Subash Chandra Bose and Shri Ramana Rishi respectively i.e. 1899, 1879.

(c) Mutiny of India—1857 V44'M57

History of India from 1526 to 1857 V44'J26←M57

Melvil Dewey also uses the chronological divisions in literature and history, but the use of chronological divisions in Dewey Decimal Classification is very limited and varies from one specific literature to another specific literature and one country to another country in history. (18th ed. of D.D.C. Part II) e.g.

Chronological divisions for Canadian Literature

3 Colonial period to 1867
4 Later 19th Century, 1857—1900
5 20th Century
52 Early 1900—1945
54 Later 1945—

Chronological Divisions for U.S.A.

1 Colonial period 1607—1776
2 Post Revolutionary period 1776—1830
3 Middle 19th Century 1830—1861
4 Later 19th Century 1861—1900

Chronological divisions for English Literature

1 Early English period 1066—1400
2 Pre-Elizabethan period 1400—1558
3 Elizabethan period 1558—1625
4 Post—Elizabethan period 1625—1702
5 Queen Anne period 1702—1745
6 Later 18th Century, 1745—1800
7 Early 19th Century : 1800—1837
8 Victorian Period, 1837—1900
9 1900
91 20th Century
912 Early 1900—1945
914 Later 1945

Chronological divisions for Ireland

1 Medieval and early Modern to 1660
2 Later 17th and 18th Centuries 1600—1800
3 19th Century, 1800—1900

4 Irish literary revival 1900—1945
5 Later 20th century 1945—

Chronological Divisions for Swedish Literature

1 Medieval period to 1520
2 Reformation period, 1520 —1640
3 Age of Stjernhjelm, 1640—1740
4 Age of Dalin, 1740 —1780
5 Age of Gustavur, 1780—1800
6 19th Century, 1800—1900
7 20th Century
72 Early 1900—1945
74 Later, 1945—

Modern Indic Languages (Tertiary Prakrits)

Chrological Divisions for Specific Modern Indic Languages

1 to 1345
2 1345—1645
3 1645—1845
4 1845—1895
5 1895—1920
6 1920—1940
7 1940—

Chronological Divisions for England/U.K. History

0 1 Early history, 410—1066
0 2 Norman Period, 1066—1154
0 3 Houses of Plantagenet, 1154—1399
0 4 Houses of Lancaster and York, 1399—1485
0 5 Tudor period, 1485—1603
0 6 Stuart period, 1603—1714
0 7 House of Hanover, 1714—1837
0 8 Victoria and House of Windsor 1837.

Chronological Divisions for Eastern Europe : Union of Soviet Socialist Republic (Soviet Union)

Note : Add as instructed under 930—990, but use 947.0001—947.0009 for standard subdivisions, groups, regions, persons of Eastern Europe.

001—009 Standard Subdivision, groups, regions, persons as enumerated under 930—990.

947.01—08 Historical Periods of Russia.

01 Origins to 862.
02 Kievan period, 862—1240
03 Tatar Suzerainty, 1240—1480
04 Growth of nationalism, 1480—1689
06 Peter I (the great), 1689—1725
06 Growth of empire, 1725—1796
07 Early 19th Century, 1796—1855
08 Later 19th and 20th Centuries 1855—

Chronological Divisions for South Asia : India

02 Asian dynasties and European penetration, 647—1744
021 Early period, 647—997
022 Moslem Conquests, 997—1206
023 Slave kings, Khalyi and Tughluk dynasties, 1206—1413
024 Sayyid and Lodi dynasties, 1413—1526
025 Mogul Empire, 1526—1707
029 European penetration, 1707—1774
03 British Rule, 1774—1947
031 East India Company, 1774—1858
0317 Sepoy Mutiny 1857
035 Control by Crown, 1858—1947
04 Independence and partition 1947.

Chronological divisions for United States

Use 973.01—973.09 for Standard Subdivisions, groups, regions, persons as enumerated under 930—990.

(If optional 'Areas' notation 734—739 from table 2 is used, use 973.01—973.09 for historical periods and 973.001—973.009 for Standard Subdivisions groups, regions, persons).

973.1—973.9 Historical Periods

973.1 Period for discovery and exploration to 1607
.2 Colonical period, 1607—1775
.3 Revolution and confederation, 1775—1789

.4 Constitutional period, 1789—1809
.5 Early 19th century, 1809—1845
.6 Middle 19th Century, 1845—1861
.7 Administration of Abraham Lincolon, 1861—1865 (Civil War)
.8 Later 19th Century, 1865—1901 (Period of Reconstruction)
.9 20th Century 1901.

From these examples it has been cleared that one type of chronological divisions do not represent in the literatures of different languages and in the history of different countries.

Inspite of these, we find a note on different places in Dewey Decimal Classification of Part 2 "Add Standard Subdivisions notation 0901-0904 from table 1.e.g. we find such type of notes at notation 361.901—361.904, 394.26901—394.26904 etc. Besides, we can use these chronological divisions at any place, where we need, because, these chronological divisions are the part and parcel of 'Standard Subdivisions.'

Infact we have found three types of chronological divisions under the name of Historical Periods/Period tables.

1. In Standard Subdivisions.
2. In Literature.
3. In History.

The formula to attach the chronological divisions in literaure of different languages and history of different countries varies with each other, as verified from the examples.

More examples for its proof :

909 History, description, critical, appraisal of more than one literature.

01-04 Literature from specific periods.

Add 'Standard Subdivisions' notation 0901-0904 from table 1 to base number 8. e.g. History description, critical appraisal of 18th century literature 809.033

Elizabethan period Drama in English literature 822.3
Moslem conquests in India 954.022
Constitutional period of U.S.A. 973.4

Thus the chronological divisions are neither mnemonic nor has the same formula to attach with the classes of history and literature. Moreover it creates confusion to provide a note in the schedule at different places of the schedules to use chronological divisions. e.g.

Use 973.01—973.09 for historical period and

973.001—973.009 for Standard Subdivisions, groups, regions, persons.

Besides the schedule of history of U.S.A. has a special chronological divisions as already provided under chronological divisions of United States in this topic.

Thus in my personal view the chronological digits are more mnemonic and have the same formula to attach with each class in Colon Classification instead of Dewey Decimal Classification. Dewey Decimal Classification has the chronological divisions in 'Standard Subdivisions' but these have no value for history and literature when we have found the special historical periods/tables in different classes of history and literature. In this way, they lose their mnemonic value in Dewey Decimal Classification scheme. While in Colon Classification Scheme they maintain their mnemonic value.

But we do not forget that the chronological digits represent the same period in specific language and its divisions in Dewey Decimal Classification. Similiarly chronological divisions represent the same period for the specific country and its localities. Thus historical period's digits have a limited mnemonic value in Dewey Decimal Classification.

From all this discussion, we come to the conclusion that in Dewey Decimal Classification, the arrangement of Main class history is first by place, then by period and the arrangement of Main class of literature is first by language, then form and thereafter by period.

3. Accommodating the Artifical Language in the Language Classes.

In Colon Classification, artifical languages are also individualised by Chronological device. Any number of these languages

can be accommodated as Dr. Ranganathan has created the numbers in Chapter 5 at page 2.26 and 2.27 in 6th edition with amendments for artifical languages. e.g.

Esperanto language P99M87 Esperanto was invented in 1887
Interlingus language P99N Interlingus was invented in twentieth century.

In this way, Colon Classification has provided separate numbers for nine artifical languages. These are given places after natural languages in Chapter 5 of the Colon Classification 6th edition with amendments.

In the previous editions of Dewey Decimal Classification, the artifical languages are accommodated at notation 408.9, but in the 18th edition of Dewey Decimal Classification, separate table for languages has been provided in Part I at page 407.

In the 18th editions of Dewey Decimal Classification, artifical languages has been placed at notation 499.99. e.g.

Esperanto language	499.992
Interlingus language	499.993

Though, it is not a Chronological device or systematic way yet Dewey Decimal Classification is now in a position to accommodate more artifical languages in a co-ordinate manner.

Accommodating the Different systems

In Colon Classification, different systems of Physics, Medicine, Psychology, Education, History, Economics etc. are individualised by Chronological device and the subjects are arranged in a systematic manner. But in Dewey Decimal Classification there is no such provision as this scheme provides the number to systems in each subject in a broken sequence. This is the reason that this scheme does not possess any device to secure infinite hospitality in array. Adopting the Chronological device for systems in each subject, Colon Classification secures infinite hospitality in array.

Inspite of all these, we find the Chronological device in religion, style in fine arts and several places in Anteriorising, Posteriorising personality, common isolates and several other places.

in the detailed schedule. Thus the Chronological device makes the Colon Classification so much powerful to accommodate newly developed infinite subjects in a co-ordinate manner.

The chronological divisions of Dewey Decimal Classification are not so powerful to accommodate newly developed subjects. Besides, the notation of chronological divisions are changing with each edition. The editor of Dewey Decimal Classification admits this fact in 18th edition.

D.D.C. at Page 53 Part I

"The publication of edition 17, in main class 8 each literature has had its own period divisions, which are different from those in previous editions, because those were based on the period numbers in Standard Subdivisions 0901—0904, for example, the numbers for period divisions of history and criticism of United States literature are now 810.903—9005 rather than 810.903—904 as in the 16th and earlier editions."

The Colon Classification has given an unchangeable formula for Chronological device.

D Alphabetical Arrangement

Alphabetical arrangement has been used in both Dewey Decimal Classification and Colon Classification. Colon Classification has used it on a large scale. We find two types of arrangement of alphabetics in Colon Classification and Dewey Decimal Classification :—

1. Alphabetics which have ordinal value, in respect of their mutual sequence,
2. Alphabetical device: i.e. Alphabetics which have cordinal value.

Alphabetics which have ordinal value

This type of arrangement is found in Colon Classification and Dewey Decimal Classification at a number of places

(a) Basic classes, systems and specials.

(b) Where no other method of subdivisions gives a more helpful sequence.

(c) Common isolates

(a) Basic Classes

e.g. Geology	H
Mining	HZ

(a. 1) Systems

Plantoon school	TN
Basic Wardha	TN3

(a. 2) Specials

Child specialists	L9D
Female specialists	L9F

(b) Where decimal system does not give more helpful sequence,

e.g. Analytical Chemistry	E : 3
Methods of analytical chemistry	E : 3,A
Accountancy	X : 8H

(c) Common Isolates

e.g. Cyclopaedia	k
Serial	n

Alphabetics which have ordinal value has found or where alphabetical arrangemeat is suggested in Dewey Decimal Classification.

In literature specially in English literature we found this arrangement :—

822.33 =William Shakespeare.
822.33E =Textual Criticism.
822.33 S—V=Shakespearian Tragedies.
822.33 S7—8=Tragedies of Hamlet.

D—1 Alphabetical Device

Alphabetical device means the alphabetic for sharpening the focus of a class numbers. It consists in representing a category by first letter or the first few letters in its name. If the names of two or more categories coming in the same array begin with the same letter, then, one of them is represented by first letter and the other

are represented by the first two letters in their respective names.

Dr. Ranganathan says for the use of this device is as under :

"The device is to be used only in cases where no other method of subdivision gives a more helpful sequence."

Thus Colon Classification has suggested the use of this device very rarely. e.g.

The different species of rice which are known by district names in South India are individualised by Alphabetical device in Colon Classification. e g,

J381V Vadansamla

Different makers of bicycles which are known by distinct names are individualised by Alphabetical device in Colon Classication.

D5125H Hind Cycle.
D5125He Hero Cycle.

Similarly in history Colon Classification advises to use Alphabetical device for individualisation of cities and towns of the specific states and districts etc.

In Dewey Decimal Classification we have found many instructions for the use of Alphabetical device at a number of places.

At page 48 of Dewey Decimal Classification 18th edition part I is written as under for the use of this device :—

"Options for alphabetical arrangement are provided in a few places in the schedules and auxiliary tables e.g. at notation 583, 598.81—88 and Areas notation 74—79. Other numbers with many subtopics that the Classifiers may wish to consider for alphabetical arrangement are 331.28, 338.47, 458.9."

Besides we have also found the notes for the use of this device in literature e,g.

Note at page 1483 of Dewey Decimal Classification 18th edition part II. "The following options give preferred treatment to, or make available more and shorter numbers for the Classification of literature of any specific language that it is desired to empha-

size.

B. Give prefered treatment by placing before 810 thru use of a letter or other symbol.

C. Here two or more countries share the same language.

1. Use initial letters to distinguish the separate countries." The other note is found at page 1497 in Dewey Decimal Classification. **18th edition Part II**

"Arrange as below : But if it is desired to give local emphasis and a shorter number to a specific literature, place it first by use of a letter or other symbol. e.g. Literature of Arabic languages 810, Literature of Hindi language 8HO, Literature of Punjabi language 8PO.

E Common Isolate Device

In Colon Classification, we find five types of common isolates :—

1. Anteriorising common isolate : applicable before space.
2. Anteriorising common isolate : applicable only after space.
3. An teriorising Common isolate : applicable only after time.
4. Posteriorising common isolate : Energy common isolates.
5. Posteriorising Common isolate : Personality common isolates.

All these common isolates are represented by small Roman letters fall into a parallel sequence in whatever array they may occur. In this way, they increase infinite in hospitality of array in Colon Classification.

In Dewey Decimal Classification the arrays are not formed systematically, because, it uses one type of notation i.e. Indo-Arabic numerals. To distinguish the form divisions/Standard Subdivisions are used and zero has got posteriorising value. In this way, Deway Decimal Classification does not help to so much increase the hospitality in an array as we find in Colon Classification.

For examples.

C. C.	18th ed. of D.D.C.
Ba Bibliography of Mathematics	510.16
Bk Dictionary of Mathematics	510.3
Bm Periodical in Mathematics	510.5
B.44,g.9N,N5 History of the Indian Mathematical society brought upto 1950s	510.6054

(This was the first of the mathematical society founded in India in the 20th century.)

F Zone Device

It is an other important concept to create hospitality in array. Dr. Ranganathan created four zones :—

1. Roman small alphabetics a — z
2. Indo-Arabic numerals 1 — 9
3. Roman capital alphabetics A — Z
4. Packeted notation ( )

Dr. Ranganathan says that isolate idea is of two types :—

(a) Common isolate. (b) Special isolate.

Common isolate is again of two types :—

(a1) Enumerated common isolate. (a 2) Devised common isolate.

Special isolate is also of two types :—

(b1) Enumerated special isolate. (b2) Devised special isolate.

Thus there are four sequences in an array which are called Zones. Dr. Ranganathan has used these four types of notation in his scheme.

The First Zone (i.e. Roman Small Alphabetics) is used for Generalia, Bibliography and common isolate classes.

The Second Zone (i.e. Indo-Arabic numerals) is used in enumerated common isolates.

The Third Zone (i.e. Roman Capital Alphabetics) is used for main Classes and chronological divisions etc.

The Fourth Zone (i.e. Packeted Notation) consisted of classes got by a device. viz. (Subject Device) etc. In other words, the device which we used in packeted or brackets are called packeted notation device.

For examples

P (1) Calligraphy.
P (3) Shorthand.
P (8) Typewriting.
X8 (J) Agricultural Economics.

In the 18th edition of Dewey Decimal Classification, packeted notation has also been suggested for use at page 51 Part I in Dewey Decimal Classification Scheme :—

"Showing Lanaguage in Notation : Libraries wishing to establish separate collections for their works in different language can do so by prefixing to each class number appropriate numbers from the languages notation of Table 6, e.g. (21) 536.2 and (21) 709.54 for works in English on heat transfer and India art respectively, (9144)536.2 and (9144)709.54 for works in Bengali on the same subject. Libraries wishing to class conventionally by discipline and subject, and then differentiate by language, can follow the reverse procedure, e.g., 536.2(21), 536.2(9144), 709.54 (21), 709.54(9144). The parentheses are only for illustrative purposes; any other device provided its use and meaning are clearly understood, can serve the same purpose."

Thus in Dewey Decimal Classification, we find three zones i.e.

1. Indo-Arabic Numerals.
2. Roman Capital Alphabetics.
3. Packeted Notation.

G Subject Device

It helps the classifier to classify a work dealing with two or more interrelated subjects. Thus it is another important concept to create hospitality in array in Dewey Decimal Classification Scheme.

Subject device has been done in Dewey Decimal Classification with the help of instruction 'Divide like' 000 —999 at number of places. Colon Classification has also a provision of subject device

in all the scheme. The method in Colon Classification is to put the number of isolate required along with the main class in a bracket and attach it to the main class where it occurs. e.g.

Hindu Ethics R4(Q2)
Geo-Physics H : (C)
Bio-Chemistry and Genetics G : 6 : (E9G)

In this way in Colon Classification subject device may be used wherever warranted to extend the schedule. As compared to Colon Classification, in Dewey Decimal Classification, we find the method in a restricted way in certain subjects in which we find instructions like 'Divide like' the whole classification from 000 — 999 for examples.

At notation 016 subject bibliographies
We find instructions which read 'Divide like' 000 —999 e.g.
Bibliography of Mathematics 016.51
Bibliography of Physics 016.53

2. At notation 331.39881—Service professional managerial.

We find instructions "Add 001 —999 to base number 331.39881"

Employment conditions of clerical occupation in India 331.398816510954.

Thus the subject device provides plenty of hospitality in an array.

H Gap Device

It is an important concept to create hospitality in chain. It is found a little in Colon Classification and very little in Dewey Decimal Classification. The library of congress and Brown's subject classification adopted this device in a prominent manner to accommodate newly developed classes.

In Colon Classification, this device is found in main classes, second order and third order etc. e.g.

Ed. 6 of Colon Classification reprint 1969

Main classes : 5, 6, 8 because digit
1 is for Universe of Knowlege
2 is for Library Science.

3 is for Book Science.
4 is for Journalism.

Though in the 7th edition which has been published in periodical (Library Science with slant documentation) digits 5, 6, 7, 8 and 9 have also been alloted to the some newly developed main classes e.g.

5 for Exhibition technique
6 for Museology
7 for systemology
8 for Management Sciences

Second Order

Physics, Geology and Philosophy etc., digit 9 is not alloted to any canonical class.

Third Order

Library Science	digits 7 and 8 are not alloted to any topics.
Arithmatic	digits 4, 5, 6, 7 and 8 are not alloted to any topics.
Algebra	digits 6 is not alloted to any topic.
Technology	digits 6, 7 and 8 are not alloted to any topics.
Geography	digit 7 is not alloted to any topic
Economics	digits 1, 2 are not alloted to any topics
etc. etc.	

In Dewey Decimal Classification, we have found a large number of digits unused. e.g.

002	008	134
004	009	136
005	040	151
006	104	163
007	132	164
		etc. etc. etc.

Francis Hinton, chairman, Decimal Classification editorial policy committee says about the gap device is as under :—

"For the first time, the schedules include discontinued numbers, i.e. number from the immediately proceeding edition

vacated because their content has been moved back to more general numbers. A note will indicate where the topics formerly in the dropt numbers are now to be clast. There are 210 of these discontinued number in this edition. Also for the first time, all three-digit numbers not in use, of which there are 70, will have notes telling in which edition each last had a meaning. The committee hopes that these measures will eliminate the uncertainties on these matters that classifiers working with earlier editions have experienst. The information on discontinued numbers and relocations and the three-digit unused numbers is also consolidated in two separate lists following the tables, where it can be surveyed by classifiers planning how best to adjust their records to this new edition."

Thus the Gap device is a useful device to create hospitality in chain. Both the classifiers have used it.

I Decimal Fraction Device

It is a very wonderful and most powerful device. Dr. Ranganathan says in the 'Philosophy of Library Classification' about this is as under :—

"The most potent and everlasting contribution of the Decimal Classification to the philosophy of library classification is the demonstration of the practicalutity of securing hospitality in notation by the simple device of decimal fraction notation."

Using this device every class number, without exception is considered as a pure decimal fraction. No class number is treated as an integer or as a mixture of integer and fraction. There is, therefore, no need at all to use decimal point, because, it is taken as understood before any class number. A new class is created in a chain by subdividing the class forming its last link on the basis of a new additional characteristic. e.g.

600	Technology.
630	Agriculture and related technologies.
631	General agricultural techniques.
631.5	Cultivation and harvesting.
631.58	Special cultivation methods.
631.587	Irrigation farming.
631.5872	By Furrow system.

Digit 6 is for technology. To accommodate the divisions of technology, we will have to adopt the decimal fraction notation. This device has been adopted by Dewey Decimal Classification and Colon Classification both. If Colon Classification does not adopt the concept of decimal fraction notation, it will be impossible for it (Colon Classification) to cut new grounds i.e. to accommodate the extension of new branches of knowledge. It is true that decimal fraction device only is not sufficient, it must be joined by other devices to provide hospitality in chain.

J. Facet Device

Facet device provides hospitality in chain at many points. Colon Classification has adopted this device. In it the versatility of Facet device is $1 \times 2 \times 3 \times 4 \times 5 = 120$, because, Dr. Ranganathan has tried to divide each subject into five fundamental categories. In Dewey Decimal Classification, the versatility of decimal fraction is 1. In Colon Classification, the ratio between the two is 120 : 1. Such wonderful difference was introduced by the Facet device. e.g.

Dewey Decimal Classification

600	Technology.
620	Engineering and Allied operations.
623	Military and Nautical engineering.
623.8	Nautical engineering and Seamanship.
623.82	Nautical craft.
623.825	Power driven warship.
623.8252	Battleships.

Colon Classification

X	Economics	MC
X 61	Money	P
X 61; 1	Gold	M
X 61; 1 : 5	Trade	E
X 61; 1 : 5.44	India	S
X61;1 : 5.44'N7	Seventy	T

From the above example it is clear that there is no Facet device in Dewey Decimal Classification, because it is an enumerated scheme of classification while Colon Classification scheme is based

on the Facet device and the Facet device secures infinite hospitality in chain in each category.

K Intra-Subject Phase Relation Device

In true sense, there is no provision of subject phase relation device in Dewey Decimal Classfication. In Colon Classification, the Subject phase relation device is required to meet one class number (with or without their facets and isolates to another, by means of a connecting symbol of ordinal value less than that of any connecting symbol used for a facet. In this way this scheme can very easily accommodate to the compound and complex subjects, while Dewey Decimal Classification fails to accommodate at many places. Thus Subject phase relation device creates infinite hospitality in chain.

(*For more detail see Intra-Subject phase relation of this book in chapter 2*)

L Intra-Facet Phase Relation Device

This device is similar to the Subject phase relation device with the difference that Subject phase relation device is used in case of compound and complex subject, with this device is used in the case of a subject which brings into relation two isolates in the same facet. The Intra—Facet phase relation device is found little in Dewey Decimal Classification. In Dewey Decimal Classification, it is a part of subject device instead of a separate independent device. It is only used where a note for its use is provided in Dewey Decimal Classification while in Colon Classification this device can be used where the classifier needs it.

For examples

Dewey Decimal Classification

1.	636.089	Veterinary science.
	636.7	Dogs.
	636.7089	Veterinary science of dogs.
2.	*Arachnida	595.4
	*Add as instructed under 592—599	

When we reach at page 1011 (at notation 592—599) in Dewey Decimal Classificataion we find more instructions which are as under :—

Add to notation for each term identified by * as follows :—

01—03 Standard Subdivisions.

04 General principles.

For example, General Principles of Arachnida 595.404

Add to 04 the numbers following 591 in 591.1—591.8

For example, General Principles Genetics Arachnida 595.40415

05—09 other standard subdivisions.

But at notation 591.15, we find another instruction which is written as under :—

Add to 591.15 the numbers following 581.151 –581.159

General Principles of mutations of genetics of Aruchnida 595.4041592

Thus in Dewey Decimal Classification we have found restricted type of Intra-Facet phase relation device which is a part of Subject device (or which is found under the formula of 'Divide Like') while in Colon Classification we have five types of Intra-Facet phase relation.

(*For detail see chapter 2 of this book under the heading Intra-Facet phase relation*)

M Intra-Array Phase Relation Device

Intra-Array phase relation means relation between the sub-isolates in an isolate. Sub-isolates are the division of one isolate. This device secures a great singlefold infinite for hospitality in chain. It is also frequently used in Colon Classification, but in Dewey Decimal Classification we have found restricted type of Intra-Array phase relation device which is a part of Subject device or which is found under the formula of "Divide Like". e.g. Pathological anatomy of excretory organs 591.224, because, at notation 591.22, we find a note "Add to 591.22 the number following 591.4 in 591.41—591.49." Some people may not agree with my point. They may call it that it is a synthesis device instead of restricted Intra-Array and Intra-Facet relation device in Dewey Decimal Classification scheme.

(*For detail see chapter 2 of this book under the heading Intra-Array phase relation*)

N Super-Imposition Device

This device creates infinite hospitality in chain. Super means superior (above) and imposition means the act of imposing or undue burden or fraud. Thus the super-imposition means act of imposing by superior or burden of the superior or superior fraud. But in classification Super-imposition device means attaching to one number within a facet another member within the same facet with a distinctive connecting symbol chosen for the purpose.

This device is required to be used in the case of specific topic which is not found in a schedule, but which can be represented by two isolates in the same facet, if these can be joined together by a connecting symbol, it will be called a Super-imposition device. In Colon Classification, connecting symbol used for the puspose is a hypen- e.g.

History of British India	V 44-56
Muslim families	Y2-73 (Q7)

The isolate which comes earlier in the facet of the schedule usually forms the first member of a Super-imposition device. e.g.

Rural Children	Y 11-31
History of Portuguese India	V 44-542
Hindu families	Y 2-73 (Q2)
Veins of legs	L 134-36

A. If the number is unintelligible and the using of the constituent isolate which comes later in the schedule as the first member gives an intelligible and more helpful isolate number, it must be made the first member. e.g.

Secondary Women Education	T 55-2

B. According to previous 'A' : Isolate which comes earlier in the facet of the schedule is usually from the first member of a Super-imposition device has become wrong, because, if we create the number T2-55 which is unintelligible. Thus for constructing the numbers with Super-imposition device, we should keep in mind that the connection of the topic has become intelligible.

If both the sequence of the constituent isolates give intelligible isolate number and give different meanings, the sequence should be determined by the meaning sought to be represented. e.g.

History of Portuguese Africa Y 6-56

Here both are intelligible, but we should use the notation first which is more suitable for common reading.

In this example, if we construct the number V 56-6 it will give the reverse meaning i.e. History of Portugual under Africa, but Portugual has never come under the African Kingdom. Thus using Super-imposition device in Colon Classification we should keep these points in mind.

In Dewey Decimal Classification, a such type of super-imposition device is found, in 18th edition. In it the connecting symbol is zero. But this Super-imposition device is used only where Dewey Decimal Classification has allowed to use it.

For example

Canadian Negros in India. 301.45196071054

At notation 301.4512—301.4519 there is a note as under (at page 614—5) :—

"Add Racial, Ethnic, National groups notation 2—9 from table 5 to base number 301.451.

Similarly at notation 155.84 we have found a same type of note :—

For example

United Kingdom blacks of African origin 155.8496042

In Dewey Decimal Classification, we can use this device where the editor/author has given a provision, but in Colon Classification we can use it where we need. Some people do not agree with my point that Superimposition device is found in the Dewey Decimal Classification. They says, "This is a synthesis device instead of restricted Super-imposition device."

4

Comparative study of Auxiliary schedules of Dewey Decimal Classification and Colon Classification

Q. Explain space isolates which have been provided in Dewey Decimal Classification and Colon Classification.

Ans. Space isolate is the concept which denotes a particular community or country. The importance of space isolate was not recognised by Melvil Dewey, the father of library classification. Charles A. Cutter and J.D. Brown have not yet recognised the importance of space isolate. In Colon Classification, Dr. Ranganathan has provided a separate schedule of space isolate which is a comprehensive statement of ideas to represent geographical entities. In Dewey Decimal Classification the main class history includes the concept of the history of a particular country which were as a space by 'divide like' provision in Dewey Decimal Classification. It is applicable to each and every class. In Dewey Decimal Classification, 17th ed. a separate schedule of area table has been provided to represent the space isolate. This concept has also been carried out in the 18th edition.

Similarity :

1. Both have used Arabic numerals to represent the space isolates.

2. In both the schedules U.S.A. has been represented by the number '73'

3. Both the schemes have used the digit '6' for Africa.

4. Dewey Decimal Classification has used special type of restricted 'Divide like' device to synthesise the two notation numbers of different countries. e.g. Foreign policy of India and U.K. 327.54042 while in Colon Classification, superimposition device and other formulas have been used in the whole scheme to synthesise the space numbers.

Dissimilarity

1. Dewey Decimal Classification scheme does not provide a comprehensive account of all the countries. America in general and U.S.A. in particular have been given a particular favour to represent the countries and their parts, but other countries of the world have not been enumerated to represent the main division of that country while in Colon Classification equal consideration has been given to represent the main parts of the countries. Thus we find that Dewey Decimal Classification violates the canon of enumeration and a canon of exhaustiveness etc.

2. In the 17th and 18th editions, there is no number for India, Russia etc. These have been represented by A.C.R.

3. Dewey Decimal Classification provides homonyms to represent the division of the countries for example 942 represents Great Britian, England, United Kingdom and Commonwealth.

4. Dewey Decimal Classification has not been able to give an elaborate (accurate) account of the countries of the world, while Colon Classification covers all the parts of the world in filitation.

5. The 'Divide like' provision as 'divide like 000—999' and 930—999' creates a confusion and disorder in the class number in Dewey Decimal Classification.

6. In Dewey Decimal Classification, there is no systematic index to represent the countries of the world while in Colon Classification a geographical index has been provided and arranged in an alphabetical sequence.

7. In Colon Classification we also find the other geographical entities in the schedule of geographical isolate, while Dewey Decimal Classification has not been able to represent them. e. g.

For Forest, valley and river, we can assign a notation in Colon Classification, but there is no suitable number in Dewey Decimal Classification for it. Colon Classification has given full freedom on the part of classifier to individualise a particular geographical entities by an Alphabetical device.

8. The concept of the countries which have been effected by the religion, languages, international organisations e.g., NATO-SEATO and socio-economic regions, bloc i.e. Communist bloc, Afro-Asian bloc, etc. cannot be classified by Dewey Decimal Classification before 17th edition, but these can be classified in Colon Classification for example :

Term	Colon C. 6th ed.	D.D.C. 17th ed.	D.D.C. 18th ed.	D.D.C. 16th ed.
Muslim countries in the World	1(Q7)	1767	17671	—
English speaking countries in the World	1(P111)	1752	17521	—
Communist countries	1(W691)	1717	1717	—

Though the D.D.C. has been revised upto 18th edition and C.C. upto 6th edition, there is some defect in both the schemes, yet Colon Classification has less defects than Dewey Decimal Classification. e.g

44Q7 is a notation for Pakistan and 44 respresents for India Q7 stands for Muslim religion. Thus 44Q7 is a Muslim religion of India. Pakistan is no more a part of India, but a separate independent country. Thus to represent it by 44Q7 is not useful at all. Similarly even in the 18th edition there is only one number for East Pakistan and Bangladesh. The Decimal Classification division has alloted the East Pakistan number to the Bangladesh vide its publication contains material supplementary to the Dewey Decimal Classification, Edition 18.

B. Q. Discuss the sequence of space isolate in the first order of array in Colon Classification and Dewey Decimal Classification.

Ans. First order of array means first summary of Dewey Decimal Classification and main classes of Colon Classification.

Thus the first order of array in the sequence of space isolate means main geographical digits :—

Colon Classification	Dewey Decimal Classification.
1 World	1 —
2 Mother country	2 —
3 Favourite country	3 —
4 Asia	4 Europe.
5 Europe	5 Asia.
6 Africa	6 Africa.
7 America	7 North America.
8 Australia	8 South America.
9 Paccific ocean islands	9 Paccific ocean islands. (Other areas of the world)

In Colon Classification digits 1, 2 and 3 in space isolates are alloted to world, mother country and favourite country respectively. Digits 4 and 5 are given to Asia and Europe respectively. But in Dewey Decimal Classification, there is no digit which represent to world, Mother country and favourite country. The digit 4 for Europe and 5 for Asia have been alloted in Dewey Decimal Classification. But digit 6 has been represented to Africa both in Dewey Decimal Classification and Colon Classification. In Dewey Decimal Classification, there is no digit which represents to the world, so it violates the canon of Reticence. Colon Classification has alloted the digit 3 to favourite country. Suppose today England is our favourite country, but tomorrow Russia can also becomes our favourite country because favourite country creates feeling. Thus here Colon Classification is also violating the canon of reticence.

Digit 4 in Dewey Decimal Classification represents to Europe, we feel that Melvil Dewey has alloted this digit to Europe on the point of view that the Europe (when Dewey Decimal Classification was invented) was the great power of the world but now Europe is not a great power. So it violates the canon of reticence. Digit 5 in Dewey Decimal Classification represents to Asia and 6 is representing to Africa. So Dewey Decimal Classification is also

violating spatial contiguity because Europe is nearer to Asia and Africa is nearer to Europe. The Colon Classification is not violating spatial contiguity.

Only single digit 7 is representing the whole America in Colon Classification but Dewey Decimal Classification has given digit 7 to North America and 8 to South America. America is not only one continent, it is a hemisphere. So single digit is not sufficient for America. In this way here, Colon Classification is also violating the canon of reticence. Digit 8 in Colon Classification is representing to Australia but Dewey Decimal Classification has not given any single digit to Australia. It treats this as an island and takes this under the paccific ocean islands. Thus here, Dewey Decimal Classification violates the canon of reticence because, it does not give any suitable place or equal treatment to Australia.

Though Colon Classification and Dewey Decimal Classification both violate the canon of reticence yet Dewey Decimal Classification violates many times more than Colon Classification. Besides Dewey Decimal Classification is also violating spatial contiguity.

In Colon Classification, the space isolates has mnemonic value, because, in each subject/topic these have their own value and place e.g.

History of India	V44
Geography of India	U.44
Treatment of unemployment in India	Y:433:6.44
Basic schools in India	TN3.44

It has been clear from the above examples that digits 44 stands for India not only for History and Geography but also for all the subjects and topics.

In Dewey Decimal Classification these have also a mnemonic value. The editor of the 18th edition of Dewey Decimal Classification scheme has admitted these facts. He writes at page 20 Part I of Dewey Decimal Classification :—

"The most notable memory aid is the constant repetition of a standard pattern of a real arrangement. In nearly all a areal developments, the digits 44, for instance stand for France, 45 for

Italy, 46 for Spain, 52 for Japan, 73 for United States, Consequently, since 9 is the significant notation for general history, 944 denotes history of France, 945 of Italy, 946 of Spain, 952 of Japan, 973 of United States. Likewise, since 91 is the significant notation for general geography, 914.4 designate geography of France 914.5 of Italy, 917.3 of United States. Table 2, "Areas" which specifies these area numbers, constitutes the bulk of the volume."

Thus space isolates of Colon Classification are more mnemonic than area table of Dewey Decimal Classification.

C. Q. Explain Time Isolates and state their use in Colon Classification and Dewey Decimal Classification.

Ans. Colon Classification has an auxiliary schedule of time isolates but Dewey Decimal Classification has only provision in main Classes of history and literature upto 16th edition. It is the cause that Dewey Decimal Classification is unable to classify the various subjects requiring divisions chronogically. In the 17th and 18th editions the schedule of time isolates has been provided under the schedule of 'Standard Subdivisions'. Here a note is also provided that these historical periods are not limited geographically. These may be used where the classifier needs to use the time facet. Inspite of these historical periods (Time schedule), a large number of "Time schedules" (historical periods) are given in the main schedule of History and Literature. For this purpose each country and language has its own "Time isolates" schedule (historical periods). Thus the general schedule of Time isolate which is given under the main schedule of 'Standard Subdivisions' creates confusion for its use. I think that this schedule can be used in all the classes of knowledge except history and literature.

Colon Classification can classify the various subjects with the auxiliary schedules. For example if we say rice of India, both the schemes provide the numbers, but if we say rice crops in India in winter seasons or rice of India 1972. Colon Classification will only provide the exact numbers to both the specific subjects but Dewey Decimal Classification is unable to do so, because neither it has number of winter season nor we can use here the historical periods (Time isolates). If we use the time isolate. We must leave the number of the country (India). This provision is only

provided in the 17th and 18th editions of Dewey Decimal Classification. There is no provision to use the time isolate in the main subjects of agriculture upto 16th editions.

In the main subjects of History and literature, we have no provision in the subjects to give the numbers of days and nights seasons and particular year, because, Dewey Decimal Classification has provided the numbers to specific period only. Similarly in the general schedule of Historical periods (Time isolates), we have no provision to give the numbers of days and nights ; seasons and particular year, because : Dewey Decimal Classification has provided the numbers to specific period.

For example.

02	is for 500—1500	(in general historical periods)
02	is for 1066—1154	(In British history Time isolate schedule)
02	is for 647—1774	(In Indian history Time isolate schedule)
.2	is for 1400—1558	(In English literature Time isolate schedule)
.2	is for 1345—1645	(In Modern Indic languages literature Time isolate schedule).

Thus we have no provision to accommodate 1526 to provide the exact number to it. e.g.

History of India 1526	954.02
History of India 1476	954.02

While in Colon Classification we can provide the number e.g. V44'J26 and V44'I76

As regard to the Bibliographies, conferences and reports etc.. Dewey Decimal Classification is unable to provide full number even in the provisions of general schedule of Time isolates 17th edition and 18th edition. Thus Colon Classification is able to score over Dewey Decimal Classification.

Time isolates in Colon Classification are called an auxiliary schedule, so we can apply these isolates through out the scheme requiring elucidation on chronological characteristics.

The provision of time itolate in Colon Classification is representing in capital Roman letters which stands for a Century numbers followed by Arabic numerals and small Roman letters. Small Roman letters are provided only for days, nights and seasons of the year. The first Arabic digit stands for a decade and the second stands for the particular year.

e.g. M72'n5'd

M is equal to 1800—1899.

7 represents to 70—79.

02 represents to 2.

n5 represents to Autumn season.

d represents to Night.

Thus M72'n5'd means A night of Autumn in 1872. In this way Colon Classification is able to provide chronological number standing for century, decade, particular year, season, day time and night time etc. It is also provided a chronological number to different period together. The symbol used for this purpose is arrow. e.g.

Economics of India 1947 to 1972 X.44'N72←N47

In such cases backward arrow is used since the basic class number gets the chronological number of the last effect to decade.

In Colon Classification chronological number is used to differentiate authors, Biographies and works, etc. These numbers can also use for providing different theories in Physics and other subjects. Space isolate is also used for differentiate the systems for subjects.

The Dewey Decimal Classification's schedule of time isolates are not so expansive, this is the cause that this scheme is unable to provide such full numbers.

Besides there is no consistency about the use of time isolates in Dewey Decimal Classification. Besides all this, the notation of time isolates in Colon Classification have a mnemonic value, but in Dewey Decimal Classification, the historical periods (Time isolates) have no mnemonic value in the subject of history and literature.

(For more detail Please see Part 'Comparative study' under the heading 'Chronological device' of this book).

D. Q. Discuss the language isolates as provided in Colon Classification and Dewey Decimal Classification ?

Ans. Language isolates are provided both in Colon Classification and Dewey Decimal Classification. Their way to provide these in the scheme is different from one another. Colon Classification has provided these in auxiliary schedule under the name of language isolates and Dewey Decimal Classification has provided under 'Language' in schedules i.e. Part II and Languages table i.e. Table 6 Part I in 18th edition. The languages table may be expansive in the 18th edition, but it is not so useful like the language isolates of Colon Classification. But it is true that with the languages table No. 6, Dewey Decimal Classification is able to represent language in every subject like Colon Classification. e.g.

Works in French on heat transfer 536.2(41)

Works in Punjabi (Gurmukhi) on Indian art 709.54(9142)

Before 18th edition of Dewey Decimal Classification it is only applicable in literature, because, there is no language table upto 17th edition. e.g.

420 is provided for Englsih language under the main class Language (Linguistics). English literature gets the number 820 under the main class 'Literature with a note' the language schedule provides in language (Linguistics) is also applicable here.

In both the schemes the language isolates are as under :—

Colon Classification

(1st Group)	(2nd Group)	(3rd Group)
1 Indo-European	12 Latin	13 Greek
11 Teutonic	121 Italian	14 Slavonic
11011 Gothic	122 French	141 Lethic
110153 Low Frisian	123 Spanish	142 Russian
110155 Old Frisian	124 Portuguese	143 Bulgarian
111 English	128 Celtic	144 Illyrian
112 Dutch	1183 Welsh	1441 Slav
113 German	1285 Irish	1442 Servian
114 Swadish	1287 Scotch, Gaelic	145 Polish
115 Norwegian		146 Bohemian
116 Danish		
117 Icelandic		

(4th Group)		(5th Group)		(Other Groups)	
15	Sanskrit	16	Iranian	2	Semitic
151	Prakrit	161	Avestic	21	Bablonian including Syriac
1511	Pali	162	Pehlavi	22	Assyrian
1512	Maharastrian	164	Parsian	24	Aramaic
1516	Ardhamagadhi	165	Afghan (Pushtu)	25	Hebrew
1517	Magadhi	168	Urdu	26	Phoenician
1518	Apabhramsa			28	Arabic
15198	Sinhalese	17	Armenian	3	Dravidian
152	Hindi	18	Albanian	31	Tamil
153	Punjabi	191	Tockarish	32	Malayalam
154	Kashmiri	192	Phyrigian	33	Kanarese
155	Marathi	197	Hittite	34	Tulu
156	Gujarati			35	Telugu
157	Bengali			36	Kui
158	Assamese			38	Brahui
1591	Oriya			39	Toda, etc.
1595	Nepalis			4	Other Asian languages
				5	Other European languages
				6	Other African languages
				7	Other American languages
				8	Other Australian languages
				9	Other oceanic languages
					Etc.

Note :—*After 39, other languages divisions 4—9 to be divided by Geographical device.*

Dewey Decimal Classification

In Language Schedule D.D.C. Part II

410	Linguistics	491	East Indo-European & Celtic.
420	English & Anglo-Saxon languages	492	Afro-Asiatic (Hamito-Semitic)
430	Germanic languages, German	493	Hamitic & Chad languages
440	Romance languages, French	494	Ural-Altaic, Paleosiberian, Dravidian
450	Italian, Romanian, Rheato-Romanic	495	Of East & Southeast Asia
460	Spanish & Portuguese languages	496	African languages.
470	Italic languages, Latin	497	American aboriginal languages
480	Hellanic languages, Classical Greek	498	South American aboriginal.
490	Other languages	499	Other languages.

In Languages Table 6 D.D.C. Part I

1 Indo-European (Indo-Germanic languages
2 English and Anglo-Saxon Languages.
3 Germanic (Teutonic) Languages.

391 Old low Germanic languages.	21 English.
392 Frisian.	31 German.
393 Netherlandish languages.	32 Franconian.
3931 Dutch.	33 Swabian.
3932 Flemish.	34 Alsatian.
3936 Afrikeans.	35 Swiss German.
394 Low German (Plattdeutsch).	37 Yiddish.
395 Scandinavian languages.	38 Pennsylvania Dutch.
	39 Other.

In this way in the 18th edition of Dewey Decimal Classification the language table has been introduced with expansion.

In Colon Classification 1 to 197 belongs to Indo-European languages, 2 Semitic languages and 3 Dravidian languages while other languages have a provision to make the number by Geographical device.

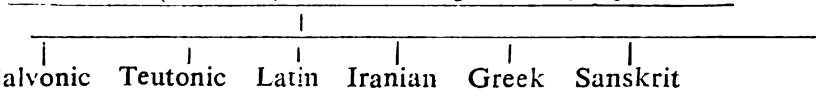
In Dewey Decimal Classification 2 to 8 all the numbers have been given to the Indo-European languages specially European languages, and digit 9 has been left for the languages of the whole world. Besides a large number of Indo-European languages have also placed in digit 9. Thus the 9 digit has made a hotchpotch of languages. The Semitic and Dravidian group are not found well in the whole Dewey Decimal Classification.

Though it is correct that many languages of the countries have not been found in Colon Classification, yet there is a provision to make number by Geographical device. For example :—

Japan has got notation 42. 42 also represents Japanian language. The Dewey Decimal Classification has no such type of provision.

Besides in Dewey Decimal Classification, filiatory and helpful sequences are very poor and its base is not on scientific lines. For example :—

Teutonic language is the mother of English and German languages, but no number has been provided for it. Similarly French, Italian and Spanish are the daughter languages of Latin language, while notation for Latin language has been provided after the notation of her daughter languages. It means the daughters have come first in the world before her mother which is against the natural truth.



In Dewey Decimal Classification, we have not noticed a suitable place to many mother languages of the modern languages. Colon Classification accommodates each and every language and it has also given a respectable place to each mother language. Thus we can say that Colon Classification pattern is based on scientific lines while Dewey Decimal Classification ignored this base.

Though the Dewey Decimal Classification in 18th edition is provided a separate schedule of language isolates, yet it cannot become powerful to accommodate all the languages.

Besides, Colon Classification also provides notation to artificial languages by means of chronological device. It also provides symbol '—' (dash) for favoured language. Favourite language means in which maximum number of books represent in the library. It occurs in the (MC) literature and linguistics. It will add to economy of notation if it can be represented by a single digit. If we use dash for favourite language, the favourite language will come first. It is a presidence that the favourite language used dash should come first. It is a local variation.

There is no such provision in Dewey Decimal Classification but it has a broken sequence. Broken sequence means arranging the certain collection in a particular place, breaking the natural seqnence and place there where generally the many readers easily consult. Thus Dewey Decimal Classification provides a broken sequence in the form of a favourite language. But Colon Classification has not provided broken sequence. We should note that broken sequence is provided to local variation for facilitate to the readers.

E. Q. Explain common isolates and compare by means of examples the type of common isolates used in Colon Classification and Dewey Decimal Classification.

Ans. Common isolates is an isolate which is common to all Main Classes or isolates which are used to most of the classes in a scheme of classification. In other words, common isolates are those minor units in the scheme of knowledge which are represented by the same term and by the same number wherever they occur in a scheme of classification. Dr. Ranganathan defines common isolates as under :—"Isolate idea represented by the same isolate term and the same isolate number in more or less every class having it." Dewey first recognised them in its 12th edition. Bliss, Cutter and Brown also recognised the principles of common isolates.

Thus both the schemes have two types of isolates (1) Common isolates (2) Special isolates. In Colon Classification, common isolates are found at page 2.5 and 2.6 of 6th edition reprint. Dr. Ranganathan has recognised this concept in the very

beginning. In the 2nd edition of Colon Classification, he has given these under the heading 'Common Subdivisions'. These are as under :—

COMMON SUB-DIVISIONS

a	Bibliography		Problem Number "7" of 'S Psychology'
b	Profession	b2	Recruitment
b1	Qualification	b3	Training
b11	Educational	b4	Research
b111	General	b5	Service conditions
b112	Special	b51	Grades
b12	Age	b52	Salary
b13	Physical	b53	Leave
b131	Longevity, expectation of life	b55	Amenities
		b56	Superannuation
b132	Anthropometrical (To be subdivided as the Problem Number "2" of Y1 'Sociology' and to be further divided by the train of Organ characteristics as in 'L Medicine')	b57	Tenure
		b6	Control
		b7	Unions, associations
		b8	Power and duties
		c	Laboratories, observatories
		d	Museums, exhibitions
		e	Instruments, machines, appliances formulas
b133	Functional, physiological. (To be further divided by the train of Organ characteristics as in 'L Medicine')	f	Maps atlases
		g	Charts, diagrams, graphs. handbooks catalogues
b16	Family, heredity, eugenical		
b17	Personality (To be subdivided as the	h	Institutions

COMMON SUB-DIVISIONS

j	Miscellanies, memorial volumes, Festschriften		
k	Cyclopaedias, distionaries, concordances	v	History
		w	Biography, letters
l	Societies	x	Collected works, selections
m	Periodicals	y1	Scope
n	Yearbooks, directories, calendars, almanacs	y2	Syllabus
		y5	Catechism
p	Conferences, congresses, conventions	y6	Synopsis
		y7	Case study
q	Bill, acts, codes	y8	Experimental work, practical work
r	Government departmental reports and similar periodical reports of corporate bodies	z	Digests
		z4	Parody
		z5	Adaptation
		z61	In verse
s	Statistics	z62	In dramatic form
t	Commissions, committees	z63	In the form of fiction
		z64	In the form of letters
u	Travels, expeditions, surveys or similar descriptive accounts, explorations, topography	z7	Symposia, lectures, essays
		:9	Criticism application

In the other editions of Colon Classification, he has given two types of common isolates. 1. Anteriorising Common Isolates 2. Posteriorising Common Isolates.

The Anteriorising Common Isolates are the isolates which are connected to the host class without any connecting symbol. These isolates such as dictionary, encyclopedia and periodicals, help in the study of the subject. These are arranged on the shelves before the subject. This is the cause, these are called Anteriorising Common Isolates.

(After this see chapter 2 of this book under the Heading Anteriorising Common Isolates and Posteriorising Common Isolates)

Melvil Dewey has not recognised these in his previous editions of Dewey Decimal Classification .As I know he has introduced these in the 12th edition. In the 13th edition, we find three types of common isolates under the Heading :—

1.	Miscellaneous Common Subdivisions	0001—0009
2.	View points	001—009
3.	Uniform Subdivisions	01—09

In the 14th edition of Dewey Decimal Classification these common isolates are provided in a reverse order.

In the later editions of 16th and 17th of Dewey Decimal Classification, "View points and Miscellaneous Common Subdivisions" have been omitted. There is a summary schedule of form divisions in the 16th and 17th editions which represent common isolates and the connecting symbols of these form divisions are usually 0, but sometimes 00 and 000. e.g.

In the 16th and 17th editions of Dewey Decimal Classification.

Use 352.0001—352.0008 for form divisions/standard subdivisions.

In the 16th editions only

352.03 to 352.09 Historical and geographical treatment.

In the 17th edition only

352.0009 Historical and geographical treatment (including continent, country, locality).

352.03—09 General administration of specific local units.

In the 16th and 17th editions.

352.002—352.006 General principles.

In this way though there is no schedule of 'View points and Miscellaneous Common Subdivisions', but their concept are found in the schedule portion of Dewey Decimal Classification in the 16th and 17th editions. In the 17th edition, a separate Area schedule is also provided.

After studying the 16th edition, Berwick Sayers described two types of form divisions. (1) Out of form divisions. (2) In a form divisions.

In the 18th edition of Dewey Decimal Classification, we have found seven tables, but table number 1 represents Standard Subdivisions. The concept which is added in the standard Subdivisions i.e. 'historical periods' which is not found in the previous editions of Dewey Decimal Classification. These historical periods can be attached with any number of the schedule where the standard subdivisions are used except main classes Literature and History etc.

Besides this, the concept of 'Miscellaneous Common Subdivisions, View points and Uniform subdivions' are found in the 18th edition also. For example :—

353. United States federal and State governments.
Use 353.0001—353.0008 for Standard Subdivisions.
353.0009 Historical and geographical treatment.
353.001—353.009 Government Service, specific administration activities. Governmental malfunctioning in federal government.
353.01—353.09 The executive in federal government.

(For more detail see Chapter 1 of this book under the heading Standard Subdivisions and other tables).

Similarity :—

Like Colon Classification, we can divide the form divisions into two parts :—

(1) Pure form divisions 02, 03, 04, 05, 06 and 08.
(2) Subject form divisions 01, 07 and 09.

If a book deals with two types of form divisions, the subject form divisions should be preferred. For example :—

Study and Essay of printing 655.07 instead of 655.04 *Or*
(in the 18th edition 08 stands for essays). 655.08

Difference :

Common isolates of Colon Classification and Dewey Decimal Classification are different from one another. Colon Classification has provided various types of Anteriorising and Posteriorising Common isolates. The use of these isolates in each scheme is varied.

Besides, by providing these common isolates Colon Classification is able to individualise several subjects while Dewey Decimal Classification is not able to do so.

Colon Classification provides co-extensive numbers in several cases and Dewey Decimal Classification is not able to achieve.

Another point of difference is the Colon Classification has provided facet formula to several common isolates. Thus Colon Classification is able to provide individual number for each type of material requiring further divisions through common isolates. Dewey Decimal Classification is unable to do so. It provides the general number with a common isolates and does not individualise each subject with a common isolate. For example :—

Periodical	m	05
Library Science periodical	2m	020.5
Indian Librarian	2m2, N46	020.5
Library Herald	2m2, N54	020.5
Herald of Library Science	2m2, N62	020.5

5

Stages of the Application of the Postulational Approach Method

0 Step : New Title.
1 Step : Full Title.
2 Step : Kernal Title.
3 Step : Analysed Title.
4 Step : Transformed Title.
5 Step : Title in Standard Terms.
6 Step : Title in Numbers.
7 Step : Title in Synthesised Numbers.
8 Step : Verification by reverse Translation.

A. Title :—Treatment of Tuberculosis of a bone of a dog.

0 Raw Title : Treatment of Tuberculosis of a bone of a dog.

1. Full Title : Treatment of Tuberculosis of a bone of a dog 'Animal Husbandry'
The word of BC class'Animal Husbandry'has been added.

2. Kernal Title : Treatment Tuberculosis bone dog 'Animal Husbandry' of a are auxiliary words.

3. Analysed Title : Treatment (2 E)
Tuberculosis (E) cum (2P)
Bone (2P)
Dog (P)
Animal Husbandry (BC)

4. Transformed Title : Animal Husbandry (BC)
Dog (P)
Bone (2P)

The Postulates prescribe that the BC will come first of all, and the sequence of facets will be PMEST. As

Tuberculosis (E) cum (2P)
Treatment (2 E)

(M) (S) (T) are absent, the sequence maintained is (P) (2P) (E) cum (2P) (2E)

5. Title in Standard Terms —do—

6. Title in numbers KZ (BC)

541 (P)	636 (BC)	995 (P)
L 82 (2P)	7 (p)	71 (P)
421 (E) cum (2P)	089 (E)	
6 (2E)	6 (E)	

Synthesised Number

C.C. KZ 541, (L 82) : 421 : 6 D.D.C. 636·708969571

8. Verification by reverse Translation

KZ is basic class
541 personality facet
(L 82) personality facet
4 energy facet
21 personality facet
6 energy facet
meaning thereby
Treatment of Tuberculosis of a bone of a dog.
636 is Basic Class
7 is personality facet
089 is energy facet
6 is energy facet
995 personality facet
71 is a personality facet
meaning by=Treatment of Tuberculosis of a bone of a dog.

B. Title : Study of Emotion in Children

0 Study of Emotion in Children.

1. Study of emotion in Children 'Psychology'.
   Here the name of main class psychology has been added.
2. Emotion, Children, 'Psychology'.

The word 'Study of and in' used in the Raw title have been omitted. They are not needed in the translation of the

specific subject, because the subject is bound to be a study and other omitted words are auxiliariey words.

3. Emotion, (E) Children (P) Psychology (BC)

Emotion is an action, hence the manifestation of energy. Children are a group of human beings, hence the manifestation of personality. Psychology is a recognised basic class.

4. Psychology (BC) Children (P) Emotion (E)

The postulates prescribe that the BC will come first of all and the sequence of facets will be PMEST. As (M) (S) (T) are absent, the sequence is PE.

5. Psychology (BC) Child (P) Space and motion (E)
6. S (BC) 1 (P) 42 (E)
7. S1 : 42 152.4 or 155.4
8. S=Psychology.
   S1=Child Psychology.
   S1 : 42=Emotion of Children Psychology.
   150=Psychology.
   152=Experimental Psychology.
   152.4=Emotion and feelings.

   OR

   150=Psychology.
   155=Differential and genetic Psychology.
   155.4=Child Psychology.

C. Title : Management of Transport in India in 1970

0 Step : Management of transport in India in 1970.

1 Step : Management of transport in India in 1970 'Economics' (in C.C.) 'Managerial Service (in D.D.C.)

As the name of the main class was missing in the raw title it has been added under this step.

2 Step : Management, Transport India 1970 'Economics (C.C.) Managerial Service (D.D.C.)

The words 'of, in and in' are auxiliary words. These are not necessary for depicting the specific subject by the document. Hence these have been omitted.

3. Step : Management (E) Transport (P) India (S) 1970 (T) Economics (BC) in C.C. and Managerial Service (BC) in D.D.C.

In C.C. management is an action, hence the manifestation of Energy. Transport is an Industry, hence the manifestation of personality. India is a geographical unit, hence the manifestation of space. Economic is a recognised Basic Class.

4. Step : Economics (BC) in C.C. and Managerial Service (BC) in D.D.C. Transport (P) Management (E) India (S) 1970 (T)

The postulates prescribe that the BC will come first of all and the sequence of facets will be PMEST. As (M) is absent, the sequence is PEST.

5. Step : All the terms are used as standard terms, therefore, there is no need for replacing any terms.

6. Step :

C.C. =X(BC) 4(P) 8(E) 44(S) N70(T)

7. Step : C.C. X4:8.44'N70
D.D.C. 658.9138050954046.

8. Step : X = Economics
X4 = Transport Economics.
X4:8 =Management of transport in Economics
X4:8.44=In India Management of transport in Economics.
X4:8.44'N70=Management of transport in India in 1970 under economics.
650 = Managerial Service.
658 = General Management.
658.9=Management of specific kinds of enterprises.
658.91=Service and professional,
658.913805=Management of transport service.
658.9138050954=Management of transport in India.

658.9138050954046=Management of transport in India during 1970.

D. Title : Devaluation of Paper money in India in 1968.

0. Step : Raw Title : Devaluation of Paper money in India in 1968,

1. Step : Full Title : Devaluation of paper money in India in 1968 'Economics'

As the name of the main class was missing in the raw title it has been added under this step.

2. Step : Kernal Title : Devaluation paper Money India 1968 Economics,

The words 'of and in' are auxiliary words. They are not necessary for depicting the specific subject by the document. Hence these have been omitted.

3. Step : Analysed Title : Devalution (E) Paper (M) Money (P) India (S) 1968 (T) Economics (BC)

Devalution is an action, hence the manifestation of Energy, Paper is material, hence the manifestation of matter, money is a wealth, hence the manifestation of Personality, India a Geographical unit, hence the manifestation of Space, Economics is a Basic Class in C.C.

4. Step : Transformed Title : Economics (BC)
Money (P)
Paper (M)
Devaluation (E) cum (2P)
India (S)
1968 (T)

The postulates prescribe that the BC will come first of all and the sequence of facets will be PMEST.

5. Step : Title in Standard Terms : Economics (BC) Money (P) Paper (M) Depression (E) cum 2P) India (S) 1968 (T).

6. Step : Title in Numbers : X (BC) 61 (P) 4 (M) 742 (E cum 2P) 44(S) N68 (T)

7. Step Title In Synthesised Numbers : X61;4:742.44'N68

8. Step : Verification

X = Economics.

X61=Money, Economics.

X61;4=Paper money, Economics.

X61;4:7=Value of paper money, Economics,

X61;4:742=Depression of paper money in Economics.

X61;4:742.44=In India depression of paper money in Economics.

X61;4:742.44'N68=Devaluation of paper money in India in 1968 under Economics.

6

Postulational Approach

According to C.C.

A. Title : Flood relief in U.P. in 1973

Y	Sociology.
Y:	False Link.
Y:43	Destitution, sociology.
Y:4355	Flood destitution, sociology.
Y:4355:6	Relief word of flood, destitution in sociology.
Y:4355:67	Treatment of relief work flood destitution.
Y:4355:67.44	In India relief work in sociology.
Y:4355:67.4452.	In U.P. relief work of flood in sociology.
Y:4455.67.4452'N73.	Flood relief in U.P. in 1973 under sociology.

According to D.C.

Title : Flood relief in U.P. in 1973.
Class No. 361.52

300	Social Sciences
301	Sociology
360	Welfare and Association
361	Social Welfare
361.52	Flood relief.
	Flood relief in U.P.

Step 0. Raw Title Flood relief in U.P. in 1973.

Step 1. Expressive Title Flood relief measure taken in U.P. in 1973 is being a social pathology in the subject in sociology.

Step 2. Kernal Title Flood relief, U.P. 1973, Social pathology, sociology.

Step 3. Analysed Title.
Flood Energy cum Second Personality.
U. P. Space.
1973. Time.
Relief Second Energy cum third Personality.
Sociology Main Class.

Step 4. Transformed Title : Sociology, flood, U.P. 1973, Relief.

Step 5. Title in standard terms : Sociology, Flood, U. P. 1973, Relief.

Step 6. Title in facet numbers : Sociology (Main Class).
Flood 4355 (E) cum (2P)
Relief. 67 (2 E) cum (3 P)
U. P. 4452 (S)
N73 (T)

Step 7. Synthesised title : Y : 4355:67.4452'N73

Step 8. Verification :—

Y : 4355 : 67.4452' N73 Flood Relief in U.P. 1973.
Y : 4355 : 67.4452 Flood relief in U. P.
Y : 4355 : 67.44 Flood relief in India.
Y : 4355 : 67. Relief work treatment, flood destitution sociology.
Y : 4355 In sociology flood destitution.
Y : 43 Unsought Link.
Y Sociology.

B. Title : Treatment of lungs of tuberculosis.

Class No. L45:421:6

According to C.C. :—

L	Medicine.
L4	Respiratory system in medicine.
L45	Lungs, Medicine.
L45 :	Energy Aspect.
L45 : 4	Disease, lungs, Medicine.
L45 : 42	Infection, disease, lungs, medicine.
L45 : 421	Tuberculosis, disease, lungs, medicine.
L45 : 421 : 6	Therapeutics, Tuberculosis, lungs.

According to D. C.

Title :—Treatment of lungs of tuberculosis.

	616.99524
600	Technology.
616	Medicine.
616.995	Tuberculosis.
616.99524	Tuberculosis, lungs, medicine.

Treatment of Lungs of Tuberculosis.

Step 0. Raw Title : Treatment of lungs of tuberculosis.

Step 1. Expressive Title : Treatment of lungs of tuberculosis taken in the Respiratory system under medicine.

Step 2. Kernal Title : Treatment, Tuberculosis, lungs, Medicine.

Step 3. Analysed Title :—

Medicine	(Basic Class)
Lungs	(Personality)
Tuberculosis	(Energy) cum (Personality)
Treatment	(Energy)

Step 4. Transformed title :—Medicine, lungs, tuberculosis, treatment.

Step 5. Title in standard forms :—Medicine, Lungs, tuberculosis, Therapeuties.

Step 6. Title in facet number :—

L	(Basic Class)
L45	(Personality)
L45:421	(E) cum (2P)
L45:421:6	(2E) cum (3P)

Step 7. Synthesised Title :—

L	Medicine.
L4	Medicine, Respiratory system.
L45	Medicine, Lungs.
L45 :	False Link.
L45:421	Medicine, Respiratory system, lungs. Tuberculosis.
L45:421:6	Medicine, Respiratory system, Lungs Tuberculosis and therapeutics.

C. Title : Diagnosis of disease
Class No. L:4:3

According to C.C.

L Medicine.
L:4 Disease, Medicine.
L:4:3 Diagnosis, disease, medicine.

According to D.D.C.

Title : Diagnosis of disease. 616.075
616 Medicine.
616.07 Pathology.
616.075 Diagnosis

Diagnosis of Disease

Step 0 Raw Title : Diagnosis.

Step 1 Expressive Title : Diagnosis of disease is being a 'Pathology' in the subject in 'medicine'.

Step 2 Kernal title : Diagnosis, disease, medicine.

Step 3 Analysed Title

Medicine	(Basic Class)
Disease	(Energy)
Diagnosis	(Energy)

Step 4 Transformed title : Medicine, disease, diagnosis.

Step 5 Title in standard terms : Medicine, disease, diagnosis

Step 6 Title in facet numbers :

L Medicine.
L:4 Disease.
L:4:3 Diagnosis of disease.

Step 7 Synthesised title : L:4:4

Step 8 Verification :—

L Medicine.
L:4 Disease (E)
L:4:3 Diagnosis, disease, medicine.

D. Title :—Preservation of Butter

Class No. KZ311:73:8

KZ	Animal Husbandry.
KZ3	Food, Animal Husbandry.
KZ31	Secretion-Animal Husbandry.
KZ311	Cow, Animal Husbandry.
KZ311:7	Produce of Cow Animal Husbandry.
KZ311:73	Animal Husbandry, Cow, Butter.
KZ311:73:8	Preservation. Cow, Butter.

Title :—Preservation of Butter—637.2

600	Technology
630	Agricultural and Agro-Industry.
637	Dairy and related Industry.
637.7	Butter.

Step 0 Raw Title : Preservation of Butter.

Step 1 Expressive Title : Preservation of butter in the dairy.

Step 2 Kernal Title : Preservation, Cow, Butter, Animal Husbandry.

Step 3 Analysed Title :—

Animal Husbandry	(Basic Class)
Cow	(Personality)
Butter	(Energy) cum (2 Personality)
Preservation	(2E) cum (3P)

Step 4 Transformed Title :—Animal Husbandry, Cow, Butter, Preservation

Step 5 Title in standard terms :—Animal Husbandry, Cow, Butter, Preservation.

Step 6 Title in facet numbers :

Animal Husbandry	KZ
Cow	KZ311
Butter	KZ311 : 73
Preservation	KZ311 : 73 : 8

Step 7 Synthesised Title : KZ311:73:8

Step 8 Verification :—

KZ	Animal Husbandry.
KZ3	Food, Animal Husbandry.
KZ31	Secretion, Animal Husbandry.
KZ311	Cow, Animal Husbandry.
KZ311:7	Produce of Cow
KZ311:73	Butter, Cow, Animal Husbandry.
KZ311:73:8	Preservation, Butter, Cow.

E. Title :—Fungus disease of Broncbi.

Class No. L44:433

L	Medicine.
L4	Respiratory system in medicine.
L44	Bronchi in medicine.
L44:	Energy aspect.
L44:4	Disease, bronchi in medicine.
L44:43	Parasite, disease, bronchi in medicine.
L44:433	Fungus disease of bronchi in medicine.

Fungus disease of Bronchi 616.969

600	Technology
610	Medical science.
616	Medicine.
616.96	Parasitic disease in medicine.
616.969	Disease due to fungi.

Step 0 Raw Title : Fungus disease of Bronchi.

Step 1 Expressive Title : Disease of bronchi in respiratory system, caused by fungus, a parasite belonging to the subject Medicine.

Step 2 Kernal Title : Disease, bronchi, fungus, medicine.

Step 3 Analysed Title :

Medicine	(Basic Class)
Fungus	(E) cum (2P)
Bronchi	(P)
Disease	(E)

Step 4 Transformed Title : Medicine, Bronchi, Fungus, Disease.

Step 5 Title in standard terms : Medicine, Bronchi, Fungus, Disease.

Step 6 Title in facet numbers

L	Medicine
L44	Bronchi
L44:	Energy aspect.
L44:4	Disease
L44:433	Fungus

Step 7 Synthesised Title. L44:433

Step 8 Verification

L	Medicine.
L4	Respiratory system in medicine.
L44	Bronchi in medicine.
L44:4	Disease, Bronchi in medicine.
L44:43	Parasite, disease, bronchi in medicine.
L44.433	Fungus, disease of bronchi in medicine.

F. Title :—Analytical conics in 1971

Class No. B622:2'N7

B	Mathematics.
B6	Geometry in mathematics.
B62	Plane.
B622	Curve of the second degree of geometry.
B622:23	Elementary co-ordinate curve of geometry in Mathematics.
B622:23'N71	Analytical conics in 1971.

According to D.C.

Analytical conics in 1971

Class No. 516.2

500	Pure sciences.
510	Mathematics.
516	Analytical co-ordinate geometry.
516.2	Geometry.

Analytical Conics

Step 0 Raw Title=Analytical conics written in 1971.

Step 1 Expressive Title=Analytical conics written in 1971 taken in Geometry under Mathematics.

Step 2 Kernal Title : Analytical conics, Geometry, Mathematics 1971.

Step 3 Analysed Title

Mathematics	(Basic Class)
Geometry	(CD)
Analytical	(P)
Conics	(E) cum (2P)
1971	(T)

Step 4 Transformed Title=Mathematics, geometry, analytical conics.

Step 5 Standard terms Title=Mathematics, geometry, curve of the second degree, elementry co-ordinate, time.

Step 6 Title in facet numbers :—

B	Mathematics.
B6	Geometry.
B622	Curve of the second degree.
B622:	Energy sign.
B622:23	Elementry co-ordinate.
N71	Time.

Step 7 Synthesised title=B622:23'N71

Step 8 Verfication :

B	Mathematics.
B6	Geometry in Mathematics.
B622	Curve of the second degree of geometry in Mathematics.
B622:23	Elementry co-ordinate geometry.
B622:23'N71	Analytical conics written in 1971.

7

Analysed Titles

Titles with C.C. Numbers	D.D.C. Numbers
1. Colon Classification of Library Science =2: 51'N3 2=Library Science (BC) :=Energy Aspect. :5=Technical Treatment. :51=Classification (E) cum (2P) 'N3=1930 (T)	025.4 020=Library Science. 025=Library Operations .4=Classification.
2. Circulation of the Newspapers =2;44:6 2=Library Science (BC) ;=Matter Aspect. ;44=Newspapers. :=Energy Aspect. :6=Circulation (E) cum (2P)	025.6005 020=Library Science. 025=Library Operations .6=Circulation Services 005=Serial Publication
3. Book Selection in University Library = 234 : 81 2=Library Science (BC) 23=Academical 234=University (P) :=Energy Aspect. : 8=Administration. : 81=Book Selection (E) cum (2P)	027.7 020=Library Science. 027=General libraries. .7=College and University Libraries.
.4. Newspapers Selection in the University Library=234 ; 44:81 2=Library Science. .23=Academical Llbraries	027.7005 020=Library Science. 027=General Libraries. .7=College and University Libraries.

Titles with C.C. Numbers	D.D.C. Numbers
234=University (P) ;=Matter Aspect. ;44=Newspapers :=Energy Aspect. :8=Administration. :81=Book Selection (E) cum (2P)	005=Serial Publication.
5. Maintance Work in Libraries for the blind=268 : 88 2=Library Science. 26=Special Class. 268=Blind. :=Energy Aspect. : 8=Administration. : 88=Maintainance (E) cum (2P)	027.663 020=Library Science. 027=General Libraries. .6=Libraries for special groups and specific organisations. .66=Welfare Institution Libraries. .663=Libraries for the Blind.
6. Fermat's Last Theorem=B 13, 5K B=Mathematics (BC) B1=Arithmatic B13=Integer (Theory of Numbers) ,5K=Fermat's Last Theorem. (P2)	512.83 510=Mathematics. 512=Algebra. 512.8=Abstract Algebra 512.81=Theory of Numbers. 512.83=Fermat's Last Theorem.
7. Numerical solution of Algebric Equations= B23 : 1 B=Mathematics. B2=Algebra. B23=Algebric Equation. :=Energy Aspect. : 1=Numerical Solution.	512.83 510=Mathematics. 512=Algebra. 512.8=Abstract Algebra. 512.83=Determining Including Numerical.
8. Linear transformations of *n*th degree Binary=B 252, 7 : 1 B=Mathematics (BC)	512.86 510=Mathematics. 512=Algebra.

Note :—Titles related to Mathematics are not analysed with 18th ed. of D.D.C.

Titles With C.C. Numbers	D.D.C. Numbers
B2=Algebra.	512.8=Abstract Algebra.
B25=Higher Algebra.	512.896=Theory of Groups Linear Transformation.
B252=Binaries (P)	
,7=*n*th degree (P2)	
:=Energy Aspect.	
:1=Linear Transformation (E) cum (2P)	
9. Numerical Solution of ordinary Linear differential second order Equation= B331,1,2:1	517.382
B=Mathematics (BC)	510=Mathematics
B3=Analysis.	517=Calculus.
B33=Differential and integral Equation.	.3=Integral.
B331=Ordinary. (P)	.38=Differential Eqations.
,= (P2) Sign.	.382=Ordinary.
B331,1=Linear.	
,= (P3) Sign.	
B331,1,1.2 : 1=Second order.	
B331,1,1,2 : 1=Energy Aspect.	
B331,1,1,2 : 1=Numerical Solution (E) cum (2P)	
10. Lebesgue Integral=B37:1N	517.37.
B=Mathematics	510=Mathematics.
B3=Analysis.	517=Calculus
B37=Real Variable	.3=Integral
:=Energy Aspect.	.37=Integral Equation
B37:1=Integral.	
B37:1N=Lebesgue.	
11. Differential Plane Geometry =B62:3	516.7
B=Mathematics.	510=Mathematics.
B6=Geometry.	516=Analytical Geometry
B62=Plane Geometry.	.7=Differential.
:=Energy Aspect.	
B62 :3=Differential (E) cum (2P)	

Note :—Titles related to Mathematics are not analysed with 18th ed. of D.D.C.

Titles With C.C. Numbers	D.D.C. Numbers
12. Analytical Conics=B622:23 B=Mathematics. B6=Geometry. B62=Plane Geometry. B622=Curve of the second degree (P) : =Energy Aspect. B622:23=Elementry Co-ordinate (E)(2P).	516.2 510=Mathematics. 516=Analytical Geometry .7=Conics.
13. Report of the Astronomer Royal, Royal observatory, Greenwich =B9.56, f2,Gr. B=Mathematics (MC) B9=Astronomy .56 England (SI) ,f2=Observation (PCI) ,G=Greenwich r=Report (CI)	522.19 520=Astronomy and Allied Sciences. 522=Practical and Spherical Astronomy ·1=Observatories. ·19=Special Observatory
14. Right ascension=B9:513 B=Mathematics (BC) B9=Astronomy. :=Energy Aspect. :513=Right ascension. (E) cum (2P)	522.7 520=Astronomy & Allied Sciences. 522=Practical & Spherical Astronomy. .7=Spherical.
15. Orbits of comets=B952 : 72 B=Mathematics (BC) B9=Astronomy B95=Meteror and comet. B952=Comet. : =Energy Aspect. B952:7=Theoretical astronomy. B952:72=Orbit. (E) cum (2P)	523.63 520=Astronomy & Allied Sciences. 523=Descriptive Astronomy .6=Comets .63=Orbits

Titles with C.C. Numbers	D.D.C. Numbers
16. Science Abstracts. A Physics Cam56,M	505
C=Physics.	500=Pure Sciences.
a=Bibliography (CI)	505=Serial Publications
m=Periodical (CI)	
56=Great Britain (GD) (P)	
,M=1800 (TI) as (P)	
17. Reports on Progress in Physics. (Physical Society ,Lendon) =Cvm56,N	530.3
C=Physics (BC)	500=Pure Sciences 530=Physics.
v=Progress	530.05=Physics periodical
m=Periodical (CI)	
56=London (GD) (P)	
,N=1900 (TI) (P)	
18. Compressibility of Liquid =C25 : 53	532.2
C=Physics (BC)	530=Physics.
C2=Properties of matter	532=Machanics of fluids.
C25=Liquid (P)	.2=Compressibility (Hydostatics)
: =Energy Aspect.	
C25:5=Change of state (E)(2P)	
C25:53=Division of 5 (Compress).	
19. Velocity of Sound in Water C3:21;5	534.202
C=Physics (BC)	500=Pure Sciences,
C3=Sound	530=Physics
:=Energy Aspect.	534=Sound
C3 21=Velocity (E) cum (2P)	.2 =Propagation
C3.21 ;=Matter Aspect.	202=Velocity.
C3:21 ; 5=Liquid	
20. X Ray Spectra=C53:3	537.5352
C=Physics (BC)	530=Physics.
C5=Radiation	537=Electricity & electronric

Titles with C.C. Numbers	D.D.C. Numbers
C53=X Ray (P) : =Energy Aspect C53:3=Dispersion (spectroscopy)	.5=Electronics. .53=Discharge of electrons through rarefield gas & high Vacuume Tubes. .535=X ray & gamma rays electronics .5352=Spectroscopy.
21. Scattering of cosmic rays =C9B38:58 C=Physics (BC) C9B38=Nuclcus C9B38=Cosmic rays (P) : =Energy aspect. C9B38:58=Scattering(E) cum (2P)	539.7223 530=Physics 539=Modern Physics. .722=X, gamma, Cosmic rays .7223=Cosmic Rays.
22. Band spectra according to Wave Mechanics.=CN2,5:33 C = Physics (BC) CN =Relativity. CN2=Wave Mechanics CN2,5=Liquid : =Energy Aspect. C2,5:3=Dispersion (Spectroscopy) CN2,5:33=Band Spectrum(E) cum (2P)	539.744 530=Physics. 539=Modern Physics. .7=Nuclear structure (Physics) .744=Interpretation.
23. Designing of surplus weir for tank =D27,3:4 D=Engineering (BC) D2 Irrigation and drainage work D27=Tank D27,3=Surplus work D27,3:=Energy aspect D27,3:4=Design (E) cum (2P)	628.13 620=Engineering. 628=Sanitary & Municipal Engineering .1=Muncipal water Supply. .13=Storage Tank.

24. Narrow gauge railway curves
=D41531,5
D=Engineeing (BC)
D4=Transport—track
D41=land
D415=Railway.
D4153=ordinary
D41531=Narrow Gauge (Ballast)
,=P2 sign.
,5=Curve.

525.11
620=Engineering
625=Rail roads & Their Rolling Stock, High ways
.1=Railroads
.11=Curve (Survying)

25. Specification for the brake of Railway carriage=D5153,8:5
D=Engineering (BC)
D5153=Railway carriage (P)
,8=Brake
:=Energy aspect.
:5=Specification

645.45
620=Engineering
625=Railroads & high ways
.2=Rail road rolling stock
.25=Accessory equipments

26. Television=D65,45
D Engineering (BC)
D6=Mechanical Engineering
D65=Electronic
,45=Television

621.388
620=Engineering
621=Applied Physics
.3=Electrical Electronic, Electromagnetic Engineering
·38=Electronics and Communication Engineering
·388=Television

27. Electronics Searcher
D65,8 (2 : 55)
D=Engineering (BC)
D6=Mechanical Engineering
D65=Electronics (P)
D65,8=Machine Tool (P2)
(2: 55)=Information retrieving(P2)

621.381
620=Engineeing
621=Applied Physics
·3=Electronic Enginerring
·38=Electronics and communication Engineering
·381 Electronics Engineering.

28. Electronics Computer=D65,8(B)
D=Engineering (BC)
D6=Mechanical Engineering

621.38195
620=Engineering
621=Applied Physics

Titles with C.C. Numbers	D.D.C. Numbers
D65=Electronics (P) ,8=Mechine tool (P 2) (B)=computer	·3=Electronic, electrical etc. ·38=Electronics and communication Engineering

29. Translating machines D65, 8 (P : 795) 681·6

D=Engineering	680=Hand craft Misc-Manu.
D6=Mechanical Engineering	681=precision, Mechanism and related Machines
D65=Electronics (p)	.6=Printing and duplicating machines and equipment
D65,8=Machine tool (P 2)	
(P : 755)=Translating	

30. Transmission of electricity=D66,2 621.319

D=Engineering	620=Engineering
D=Mechanical engineering	621=Applied Physics
D66=Electronics (P)	.3=Electrical Engineering
,2=Transmission (P 2)	.31=Generation, transmission, modification of electrical energy
	.319=Transmission.

31. Construction of over-head transmission 621.31922

Wires=D66,21 : 7	620=Engineering
D=Engineering	621=Applied Physics
D6=Mechanical engineering	.3=Electrical, electronics etc.
D66=Electrical (P)	.31=Transmission, Generation etc.
,21=Overhead (P 2)	.319=Transmission
: =Energy aspect.	.3192=Wire Diagrams (Net work)
: 7=Construction (E)cum(2P)	.31922=Over head.

32. Design of electric lifts=D66,71 : 4 621.381

D=Engineeing.	620=Engineering
D6=Mechanical Engineering.	621=Applied Physics
D66=Electrical (P)	.3=Electrical, electronics etc.
, 71=Lifts (P2)	
: =Energy aspect.	
:4=Design	

33. Telegraphy=D65,47 621.382

D=Engineering	620=Engineering

Titles With C.C. Numbers	**D.D.C. Numbers**
D6=Mechanical Englneering	621=Applied Physics
D66=Electronics (P)	.3=Electrical, electronics etc.
,47=Telegraphy (P 2)	382=Wire Telegraphy
34. Biology of water supply =D85:(G)	628.1
D=Engineering.	620=Engineering.
D8=Municipal (Sanitary) Engineering	628=Sanitary and Municipal engineering and construction Work.
D85=Water supply.	.1=Municipal water supply
:=Energy Aspect.	
:(G)=Biology (E) cum (2P)	
35. Physical Chemsitry=E:2	541.3
	540=Chemistry and allied sciencs
E=Chemistry	541=Physical & Theoretical Chemistry
:=Energy aspect.	.3=Physical Chemistry.
:2=Physical Chemistry	
36. Volumetric inorganic Analysis =E1:34,C3	546
E=Chemistry	540=Chemistry
E1=Inorganic substance (P)	546=Inorganic Chemistry
:=Energy aspect.	
:3=Analytical Chemistry	
:34=Quantitative Analytical Chemistry (E) cum (2P)	
,C3=Volumetric (2P2)	
37. Atomic Weight of Sodium =E111:14	546.382
E=Chemistry (BC)	54O=Chemistry
E1=Inorganic Substance.	546=Inorganic Chemistry
E111=Sodium (P)	.3=Metals, Their Compound and Mixtures
:=Energy aspect.	.38=Alkali Metals
:14=Atomic Weight (E) cum (2P)	.382=Sodium

Titles with C.C. Numbers	D.D.C. Numbers
38. Estimating the presence of copper in an Alloy=E1930k13:34 E=Chemistry 193=Alloy (P) 13=Copper :43=Estimating the presence =(2p)	546.37 540=Chemistry 546=Inorganic Chemistry .3=Metals .37=Alloys.
.40. Plants and animals of India for everybody :—G:13.44 G=Biology (BC) :=Energy aspect : 13=Popular description .44=India (SI)	577·54 570=Anthropological & Biological Sciences (Life Science) 577=General nature of life. .54=South Asia (India)
.41. Mathematical biophysics =G:(C):(B) G=Biology (MC) :=Energy aspect (C)=Physics :=Energy aspect (B)=Mathematical	574.191 570=Anthropological & biological sciences (Life Science) 574=Biology .1=Physiology .19=Physics & Chemistry of vital process .191=Biophysics
.42. Proceedings, International (Technical) conference for the protection of nature, 1946=G:54p1,N G=Biology (BC) :=Energy aspect 5=Ecology 54=Prevention of disease P=Conference proceeding (C1) 1=International N=1900 (T1) as (P)	574.06 570=Anthropogical and Biological Sciences (Life Sciences) 574=Biology .06=Organisations for conference proceeding
.43. Microscopical anatomy =G1J:2 G=Biology (BC)	574.4 570=Anthropological &

G1=Basic & regional (Life)
G11=Cell
:=Enegry ospect
2=Morphology

biological sciences
574=Biology
.4=Morphology and descriptive anatomy

44. Mathematical Crystallography=H1:82:(B)
H=Geology (BC)
H1=Mineralogy
:=Energy aspect
8=Crystallography
82=Structure
:=Energy aspect
(B)=Mathematics

548.7
540=Chemistry
548=Crystallography
.7=Mathematical crystallography

45. Genesis of diamond=H191:16
H=Geology
HI=Mineralogy
H19=Precious stone
H191=Diamond
:=Energy aspect
1=Preminaries
16=Genesis

551.2144
550=Earth sciences
551=Physical & Dynamic Geology
.2=Plutonic phenomena
.21=Volcanos
.44=France

46. Earthquakes of Japan =H4132.42
H=Geology (BC)
H4=Dynamic geology
H41=Hypogene, Internal dynamics
H413=Movement and earth's crust
H4132=Earthquake
.42=Japan

551.2252
550=Earth science
551=Physical and dynamic geology
551.2=Plutonic phenomena

551.22=Earthquakes
52=Japan

47. Mesozoic stratigraphy of Alaska=H53.A76
H=Geology (BC)
H5=Stratigraphy

551.76798
550=Earth sciences
551=Physical & dynamic geology

C.C.Numbers	D.D,C. Numbers
H53=Mesozoic	.7=Historical geology
A=Alaska	.76=Mesozoic era
76=Mesozoic period	.768=Alaska

48. Cretaceous bryozoa of the world– H667.1'A34
H=Geology
H6=Palaeontology
H66=Vermes
667=Polyzoa
667.1=World
'A34=Cretaceous period

48. Mineral resources of Burma=H7.438
H=Geology
H7=Economic geology
438=Burma

553.19
550=Earth sciences.
553=Economic geology
.1=Formation and structure of deposits.
.19=Mineral veins

49. Life of J.D. Hooker =IwM17
I=Botany
w=Biography (CI)
M=1800 (TI) as (P)

580.92
500=Pure science
580=Botanical science
.92=Person biography

50. Hooker's works—I × M17
I=Botony
x=Works (CI)
M=1800 (TI)

580.8
580=Botanical science
.8=Works

51. Botany of Socortra
I=Botany
:=Energy aspect
1=Preiminaries
12=Natural history
.692 = Socortra

581.96772
580=Botanical science
581=Botany
.96=Africa
.967=Central Africa
.96772=Socortra,

52. Cow farming=KZ311
KZ=Animal husbandry
KZ31−Food
KZ31=Secretion
KZ311=Cow

636.201
600=Technology
630=Agricultural and agricultural Industries
636.2=Cattle
01=Farms

53. Dairying=KZ311:7
KZ=Animai husbandry
KZ3111=Cow
:=Energy aspect
:7=Dairying

637
600=Technology
630=Agriculture and agricultural Industries
637=Dairy and related Industry

54. Fowl farming=KZ351
KZ=Animal husbandry
3=Food
35=Egg
351=Fowl

636.5
630=Agriculture and agricultural industry
636=Animal husbandly
.5=Poultry

55. Disease of Poultry
=KZ351:4
KZ=Animal husbandry
KZ351=Fowl
:=Energy aspect
:4=Disease

56. Diagnosis of disease—L:4:3
L=Medicine
:=Energy aspect
:4=Disease
:=Energy aspect
:3=Symptom and Diagnosis

616.075
616=Medicine
.07=Pathology
.075=Diagnosis

57. Inflammation of eyelids
=L18511:415
L=Medicine
L1=Basic & regional
L18=Head
L185=Eye

617·771072
610=Medical science
617=Surgery and related Topics
617.7=Ophthalmology.

L1851=Coat
L11511=Eyelid
:=Energy aspect
4=Disease
5=Inflammation

.77=Discases of conjunctiva and cyclids
.771=Eyelids & tear ducts
·771072=Inflammation

58. Ayurvedic cure=LB:4:6
L=Medicine
LB=Ayurveda
:=Energy aspect
:4=Disease
:=Energy aspect
:6=Cure (Tharapevtics)

616.0954
610=Medical science
616=Discase including treatment
.09=Historical and Geographical Treatment
54=India

59. Cotton Spinning=M71:2
M=Useful arts
M7=Textiles
M71=Cotton
:=Energy aspect
:2=Spinning

677.21
670=Manufacture process
677=Textiles
677.2=Of seed hair fiber
.21=Cotton

60. Silk weaving=M73:7
M=Useful arts
M7=Textiles
M73=Silk
M73:=Energy aspect
:7=Weaving

677.39
670=Manufacture process·
677=Textiles
677.3=Of seed hairs fibers
.39=Silk

61. Jute carding=MJ75:13
MJ7=Rope making
MJ75=Jute
:=Energy aspect
:1=Preliminaries
:13=Carding

677.13
670=Manufacture process
677=Textiles
677.1=Textiles of bast fibers·
.13=Jute

62. Astrology=△ : 864
Spiritual experience and mysticism
:=Energy aspect
:8=Occultism
:86=Prophecy
:864=Astrology

133.5
130=Pseudo psychology
133=Parapsychology and Occultism
.5=Astrology

Title with C.C. Numbers	D.D.C. Numbers
63. Vision of disembodied souls=△, 16:5 △=Spiritual experience & misticism 16=Disembodied soul :=Energy aspect 5=Vision	133.4 133=Parapsychology & Occulticism .4=Disembled souls
64. Life of Ramana Rishi=△2y7M79 △=Spiritual experience and Mysticism. △2=Hindu y7=Case study (CI) M=1800 (TI) as (P)	133.54 130=Psudo psychology, Parapsychology, Occultism. 133=Parapsychology, Occulticism. .54=India.
65. Buddhist sculpture=ND44,C N=Fine arts (BC) ND=Sculpture ND44=India ND44,C=Buddhist	731·754 730=Sculpture & plastic arts. 731=Process and representation ·7=Sculpture in Round 54=India
66. Buddhist inconography=ND44,C8(Q4) N=Fine arts (BC) ND=Sculpture ND44=India ND44,C=Buddhist C8=Sculpture Monument (Q4)=Buddhism	731.854 730=Sculpture and plastic arts 731=Process and representations ·8=Inconography 54=India
67. Indian distemper fresco painting of landscape=NQ44,3;3:6 NQ=Painting NQ44=India ,3=Landscape ;—Matter aspeet ; 3=Fresco :=Energy aspect :6=Distemper	751.4454 750=Paintings 751=Process and forms ·4=Techniques ·44=Fresco painting 54=India

	Titles with C.C. Numbers	D.D.C. Numbers
68.	Poetic criticism=0,1:g 0=Literature ,1=Poetry :=Energy aspect g=Criticism (CI)	801.951 800=literature 801=Philosophy and theory ·9=Nature and character ·951–Poetry
69.	Anthology of English Mystical poems=0111,1×(△) N3 0=Literature 0111=English literature ,1=Poetry (△)=Mysticism N=1900=(TI) as (P)	821.08 800=Literature 820=Of English and anglosexon language 821=English poetry ·08=Collections and anthologies
70.	Hamlet=0111,2J64,51 0111=English literature ,2=Drama J64=William Shakespeare ,51=Hamlet	822·3357 820=Of English and anglesexen languages 822=Drama ·3=Elizabethan period ·33=William Shakespeare S7=Works of Hamlet
71.	Life of Tulsidas=0152,1J34w 0=Literature 0152=Hindi Literature ,1=Poetry J34=Tulsidas w=Biography	891.4310924 890=Literature of other languages 891=East-Indo-European and celtic languages ·43=Western Hindi language 092=Biography 0924=Individnal biography
72.	Yorkshire dialect=P111,9D56175 P=Language P111=English language ,9D=Dialect 56175=Yorkshire	417.24274 410=Linguistic and nonverbal Languages 417=Dialectology and Paleography 24974=Yorkshire

Titles with C.C. Numbers	D.C. Numbers
73. Pronunciation in Yorkshire dialect=P111,9D56175,1,1 P=Language P111=English language ,9D=Dialect 56175=Yorkshire ,1=Poetry :=Energy aspect :1=Pronunciation	421.524274 420=English and Anglo sexon 421=Written and Spoken code ·5=Phonology ·52=Spelling and Prounciation 4274=Yorkshire
74. Anglo-India Jargon=P111,9J44,L P=Language P111=English language ,9J=Jargon 44=India ,L=London	491.432 490=Other languages 491=East Indo European and celtic language ·4=Modern Indian language ·43=Western Hindi language ·432=English and Anglo sexon
75. Taittiriya samhita=Q125:21 Q=Religion Q1=Hinduism Q125=Taittiriya :=Energy aspect :2=Scripture :21=Samhita	
76. Pancharatra ecclesiology—Q222:451 Q=Religion Q2=Hinduism Q22=Vaisnavism Q222=Pancaratra Q222:=Energy aspect	

:4=Religious practice
:45=Public worship
:451=Ecclesiology

77. Rebirth according to Jainism=Q3:366
Q=Religion
Q3=Jainism
:=Energy aspect
:3=Theology
:36=Eschatology
:366=Rebirth

8

Subject Definitions|Meanings

Knowledge : Product of knowing ; that which is known specific : Any aggregate of facts, truths and principles known, acquired or retained by mind information etc. Or practical understanding or skill in anything ; familiar acquaintance derived from practice or experience.

Natural Science : Branch of science as Physics, Chemistry, Biology that deal with metal energy and their inter-relation and transformation or with objectively, majorable phenomena. Natural science has been divided into three parts : (1) Physical Sciences. (2) Biological Sciences. (3) Eath Sciences.

Physical Science : Pertaining to the material of universe and its Phenomena : In other words the science that treat of dead matter : Physics, Chemistry, Physical portion of geography, Meteorology and mineralogy, Astronomy and Mechanics Engineering.

Physics : A science that deals with matter and enery and their interrelation in the fields of mechanical, optics, atom, heat, light, electricity, magnetism and neclure etc.

Chemistry : The science dealing with the constitution of matter considered as composed of ultimate integral particles they may be electronic atoms or molecules, inorganic, organic chemistry etc.

Physical Geography : The science which deals with Physical forces of Earth.

Geology : The science that treats of the present constitution and structure of the earth and the operation of its Physical forces, also of the history of the development of this structure in

the part, including the causes and modes of physical changes and the occurrance and development of organisms.

Meteorology : The science that relate to weather and climate, their relation to each other and the laws to which they are subject e.g., Agricultural Meteorology, World meteorology, cosmical meteorology, dynamic meteorology, Medical meteorology etc.

Mineralogy : The science of minerals i.e. Crystallology, Physical minerology, Chemical Mineralogy etc.

Astronomy : The science that deals with the celestial bodies, their motions, magnitudes, distances and Physical constitution.

Engineering : The science and art of designing, building or using public works or the like requiring special knowledge of materials, machines, and the laws of mechanics.

Biological Science : The science of life and living organisms.

Botany : The science or branch of biology that treats of plants with reference to their structure, functions, development, analysis nomenclature and classification.

Zoology : The science which treats of animals. The branch of biology dealing with animal kingdom and its members.

Agriculture : The art or science of cultivating the ground, and raising and harvesting crops often including feeding breeding and management of livestock.

Morphology : The branch of biology dealing with the form and structure of animals and plants. The science of sturctural organic types.

Physiology : The branch of biology that treats of the vital phenomena manifested by animals or plants, the science of organic functions as distinguished from anatomy.

Anthropology : The science of the human organism of body and mind in mutual relations. The science of man.

Biology : The science of life and living organisms treating of the Phenomena (structure, growth, development, distribution and functions) manifested by animals and plants.

Medical Science : The science which deals with medical in relation to human beings and bird and animals etc.

Mathematical Science : Pertaining to or of the nature of mathematics, treating of quantities, as space, weight, and distance.

Statistic : Numerical facts, collectively pertaining to a body of things, specific, such facts relating to a numerous body of people as of a nation, state or social organisation.

Earth Science : The science which deals with the inside and surface of earth.

Geology : Given at page 117 of this book.

Mining : The business or work of a miner or mine-prospector as Gold mining, Coal mining etc.

Geography : The science that describes the surface of the earth with its various peoples, animals, natural products.

Humanities : A group of educational discipline distinguished in content and method from the physical and biological sciences and if less decesively from the social science. The group includes Languages, Literature, Fine Arts, Philosophy etc. Humanties are studies with central attention on the life of man.

Languistics : The science of languages and of the origin, history application and signification of words the comparative study of the laws and properties of languages comparative philology.

Literature : The written on printed production of the human mind collectively.

Fine Arts : Art which is concerned with the creation of objects of imagination and taste for their own sake and without relation to the utility of the object produced.

Philosophy : Literally the love of wisdom in actual usage. The science which investigates the most general facts and principles of reality and of human nature and conduct.

History : A systematic record of past events, especially, the record of events in which man has taken part.

Religion : A belief in an invisible super-human power conceived of after the analogy of the human spirit on which man regards himself as dependent and to which he thinks himself in

some degree responsible together with the feelings and practices which naturally flow from such a belief.

Psychology : The science of the human mind or soul and its activities and capacities. The science that treats inductively of the phenomena of human consciousness and of the nature and relations of the subject of them.

Social Science : Comprehensive works on the science which deal with human life in relation to society.

Political Science : The science of the form and principles of civil government and the extent and manner of its intervention in public and private affairs ,

Economic Geography : The science dealing with the facts of commerce. The relation of geographical local conditions route location of commodities of trade etc.

Education : The process of educating. The systematic development and cultivation of the normal powers of intellect feeling conduct as to render them efficient in some particular form living or for life in general.

Law : An obligatory rule of action. Specific : a rule of conduct prescribed by the supreme power in a state. A legislature enactment is the laws of God and man.

9

Titles with Notations for Practice

1,11f2	Acetalularia Cell botany	581.87
2	Advances in librarianship	020
J:(Y)	Agricultural Sociology	301.35 or 630.11 (Previous ed.)
J	Agriculture	630
B63:2	Algebraic solid geography	516.5 (16th ed.) 512.12
X8(A).73	American Industry Structure conduct performance	338.60973
W61,2.73	American Politics and government	320.973
S55:524	Anger of woman	155.633 or 179.8
KZ:(E986)	Animal hormones	591.1927
KZ	Animal Husbandry	636
G.4'N7	Animals and Plants life in the Asian continent in 1970	571.5 (Previous ed.) 574.95
2.44,g,9N33r	Annual report of the Indian Library Association	020.62254
△:864	Astrology	133.5
B9:6m73,N45	Astro-Physics: A quarterly Journal from U.S.A. started in 1945	523.01005
B92:6	Astro-Physical study of the Moon	523.3
X:8J	Auditing	657.45
D513,8:81	Automobile brakes and brake texting	629.246

D513	Automobile engineering	629.2
LB,185:4	Ayurvedic cure of myopia	615.535 OR 616.755
SN1	Behaviouristic Psychology	150.1943
T3a	Bibliography on adult education	016.374
V44y7M69	Biography of Mahatma Gandhi	923.254
V44y7M97	Biography of Subhas Chandra Bose	923.254
△44y7M63	Biography of Swami Vevakanand	921.914
SN1(G)	Biological basis of Behaviour : A programe	155.9
G	Biology	570
BZ0aG	Biology and Physical Science	574
K94(G):(C).4437	Bio-Physics of Reptilia of Rajasthan State	598.10419109544
I	Botany	580
R65,5	Brahma Suttra	294.592
2;46:55.443(94, e4,PAU'N69	Cataloguing of serials in P.A.U. in 1969 at Ludhiana	025.3430954
S:3	Character of consciousness	153.124
E:(C)	Chemical Physics	539
E	Chemistry	540
L:(E9G)	Chemistry in health and disease	615.19
E0bD35	Chemistry of Cement	666.92
R4(Q6)	Christian ethics	241
Q6:454	Christian worship	264
2;44:6	Circulation of newspapers	025.605

Y73(P15):1.491	Civilization of Indians in Afghanistan	910.03914110581
HZ551	Coal mining	622.33
J341:7:84	Cold storage of Potato	664.02852 OR 633.491
0111,3M98x	Collected Works of Ernest Hemingway	813.08004 OR 813.408 (Previous ed.)
0111,3M43x	Collection of short stories of Henry James	823.08008 OR 823,808 (Previous ed.)
0157,3M61x	Collection of short stories written by Rabinder Nath Tagore	891.44308
0111,1L72:g(Q)	Coleridge as religious thinker	821.08006 OR 821.608 (Previous ed.)
2:51'N3	Colon Classification	025.4
X5:8M4	Commercial correspondence	380 OR 651.75
P1520v3:1	Comparative Phonology of Hindi and Punjabi	414
P44:(G)	Comparative study of Indian language	491.40722 (Previous ed.) 491.409
P153,76	Comporing prose pieces of compositon in Punjabi language	491.426
P152:291	Composition of words in Hindi	491.432
X8(J):991,5.44	Conditions of employment of Agricultural workers in India	331.398830954
X:99P,5.44	Conditions of employment of clerical occupations in India	331.398816510954
X:8K	Cost Accounting	657.42
M71:2	Cotton Spinning	677.2122
z44,N69t5:g	Critical study of India's fourth five year plan	338.954

S(L)	Clinical Psychology	157.9
Y:10aV	Culture and History	901.9
Y:1.44	Culture of India	301.20954 OR 915.4
Y:356.44	Customs of India	390.0954
Lk73,N	Cyclopedia of Medicine, Surgery specialities 15v.,1962 U.S.A.	610.3
KZ 311:7	Dairying	637
D6, 8(B)	Data processing system	001·6 OR 621.381195
L9F:3.4443,d, PGI	Department of obsteries in P.G.I. Chandigarh	618.20095455
G95121	Desert biology	574.90954
D27, 3:4	Designing of surplus weir for tank	627.883
D58, 7:3	Design of propelling arrangement in space-ship	629.13436
X61; 4:742.44'N68	Devaluation of paper money in India in 1968	658.9385120954046
KZ541, (L72)	Development of cerebral function in dog	636.7089181
L;4:3	Diagonis of disease	616.075
Wk	Dictionary of Political Science	320.03
L:4	human Disease	616
P111, 9J44, L,4	Dictionary of Anglo-Indian Jargon	423.914 OR 427.003
KZ541:8	Dogs and how to groom them	636.7083
G9518:5	Ecology of mountain Area	574.5
X.4453'N70	Economic conditions of Bihar during 1970	330.9541204
X:89ZB.1(Q7)	Economic development in Muslim areas of the world	338.9117671
U6.5	Economic geography of Europe	330.94 OR 910.13304

G:(X) OR G:5	Economic of generalise life	574.6
V1(Q7):191(Q6),(X)	Economic relations between Muslim countries and Christian countries of the world	338.911767101761
X	Economics	330
X.1(Y31)	Economics of Rural region of the world	330.91734
T	Education	370
F(MD12)0gC4	Effect of heat on ceramics	666
D66e	Electrical instruments and measurement	621.374
L32:4:3	Electro-Cardiography	616.12075
D65,8(B)	Electronic digital computers	001.64044
G:19(C9B5)	Electron microscopy	535.3325
V73:91'N68	Electron of 1968 in U.S.A.	329.023730923
X	Elementry economics theory	330.1
X5	Elementry of commerce	380
X:8G	Elements of book keeping	657.2
E8	Emzymology	547.758
2k	Encyclopedia of Library and information Science	020.3
D	Engineering	620
D:(C4:7)	Engineering in thermodynamics	621.1
2xM92a	Essay in personal bibliography of Dr. Ranganathan	012.8
05,1x(R3)	European metaphysical poetry	808.81
SM	Experimental psychology	152
KZ542:1	Feeding of a dog	636.7084
KZ2:1:44	Feeding of cattle in India	636.208400954
2;1511:55	Film cataloguing rules	025.3473
N	Fine Arts	700
X:4355:67.4452'N71	Flood relief in U.P. in 1971	361.5209542

F53	Food technology	664
V44:1944Q7	Foreign policy of India and Pakistan	327.540549
V4653:1944Q7	Foreign relation between Israel and Pakistan	327.54940549
G95124	Forest biology	574.90952
B13,5K	Format's last theorem	512.7
0,1:g	Forms of poetry	801.951
KZ351	Fowl farming	636.5
W95:3	Function of the world state	321.04
Z	Generalia	000
K88;675	General Principles of sexual reproduction of Aruchndia	595.404166
U	Geography	910
U.44	Geography of India	915.4
U(Y33).44	Geography of urban region of India	915.409732
U.1	Geography of World	910
H	Geology	550
0111,3	Girl in blue	823
0111,1x	Golden treasary of poems	821
X	Ground work of economics theory	330
0111,2J64,1	Hamlet	822,3357
*z*44,e4	Hand book of Indian Universities	378.54
D6,6	Hand book of Machinary	621.81
D7	Hand book on nuclear engneering	621.48
C9B3	Hand book of nuclear physics	539
F555	Hand book of petroleum of technology	665.5
Q41.42	Hinayana Sect in Japan	294.3910952

P(3)152,J9(6)'N70	Hindi short hand practice book grade 6,1970	653.1
V	History	900
V56,3:91'N59	History of British general election of 1959	329.02342085
V56–44	History of British India	954.03
V44	History of India	954
Q23v	History of Saiva Cults	294.5513
LL,9E,18511:4:6	Homeopathic treatment of eyelid in old age	615.532 OR 617.74
J1	House plant's	635.9
F551:2	Hydroganation of coal	662.6622
V2:194'N7	India and her neighbours in 1970	327.5405
I22;12.44	Indian Algae as detailed	589,3954
NQ44;3:6	Indian distemper fresco painting landscape	751.440954
Z44,2,6	Indian Law of succession	346.954 OR 346.052
V44:1944Q7, (zM)'N71:g	Indra wins the war (War of India with Pakistan in 1971)	954.04
X8(NH)	Industrial ceramics	338.47 OR 666
S0bX(A)	Industrial psychology	331.01
L18511;415	Infiammation of eyelids	617.771072
L18511:415:6	Inflammation eyelids and their treatment	617.771072
E:3A	Instrumental methods of analysis	545.8
K56:54p1'N	Inter-National conference for the protection of pelmatozoa	593.910631
X:8H	Introduction to Accountancy	657
W6	Introduction to democracy	321.4
X:8(B28)	Introduction to econometric in management	658.4033

D.73,b	Introduction to the engineering profession in the United States	620.006173
G:6	Introduction to Genetics	575.1
C5	Introduction to modern optics by Powles	535
ND	Introduction to sclupture	730
F55	Introduction to the study of fuel	662.6
4	Jouralism	070
J741(M7:13)	Jute carding	677.02821 OR 677.13
J:1:6.44	Land transformation in India	633.400954
Z	Law	340
Z(X62)	Law relating to banking	346.082
2	Librarianship	020
2:8	Library Administration	025.1
2	Library Science	020
△2y7M52	Life of Swami Raj Hans Param Hans	922
O	Literature	800
P	Linguistics	410
D65,45:82	Maintenance of television	621.38887
X4:8.44'N70	Management of transport Industries in India in 1970	658.9138050954
G:C:B	Mathematical biophysics	574.191
C:(B)	Mathematical Physics	530.15
D0bB	Mathematical solution of engineering problem	620
B	Mathematics	510
B28	Mathematics essential for elementary statistics	519.5
J:(D6).192	Mechanisation of tropical crops	631.3
LobZ	Medical jurisprudence	340.6 (16th ed.) 614.19(18th ed.)
L	Medicine	610

T:5,1	Mental measurements	371.26
E9G:3,A	Methods of biochemical analysis	574.192
E6:3,2	Micro and Semo-micro analysis of alphebatic compound	547.348 (16th ed.) 574.4(18th ed.)
K88:2.498	Micro-Scopical anatomy in Tibet	595.409515
K96:58	Migration of birds	598.252
2:51	Modern outline of library classification	025.4
L35:4231	Modern practice in infection fever	616.9222
I5,16:2	Morphology of flowers	581.4 OR 583.04+
I,131:2	Morphology of root hair written by K.C. Pandey of Jullundur 1964	581.498
I,178:2	Morphology of the seeds pertaining to the life	582.0467
X8(D513)	Motor vehicle industry	338.476292
NQ44,J:3	Mughal water colour paintings	751.42095402
Q7:26	Muslim tradition	297.13
A	Natural Science	500
E:296	Nuclear Chemistry	541.38
C9B3	Nuclear Physics	549
L9F:3	Obsteris	618.2
△:8	Occultism	133
B311,1,2:6	Ordinary linear differential equation of the second made easy	515.35
NQ,1:3	Painting the figure in water colour	751.42
V44Q7:1944,(zD)	Pakistan espionage in India	327.547054
I:8.692	Paleo-botany of socatra a study made by the Japanese	561
L86113:4:4	Pathology of oral mucous membrane	615.66
LZ30bL:4:1	Pharmacology of nursing	615.1

R	Philosophy	100
R(Q)	Philosophy of religion	201
E:2	Physical Chemistry	541.3
E5:2	Physical Chemistry of organic compound	547.1
E:3,A	Physical methods of chemical analysis	543
C21	Physical properties of solid	531.7
C	Physics	530
CobL:17	Physics for the anaesthetist	530
I1:3	Physiology øf non flowering plants	586.01
W	Political Science	320
2:55	Practical cataloguing	025.3
E:20bL	Pre-medical Physical chemistry	540
X8(J):6.44'N3	Problems of agricultural finance in India	331.763
I95121:5p4452,N71'n7	Proceedings of the conference on desert plant ecology held at Lucknow from 10th Oct. to 15th Oct., 1974	581.526(9542 OR 581.95420954
B281p73,N61	Proceedings of the fourth Berkeley symposium on mathematical statistics and probablity in U.S.A. 1961	519.062
V44,45(Z,7,4113)	Process of opposition in India	329.954
H23:15.4423	Prospecting for sedimentary rocks in Dhanbad district of Bihar	552.5095412
S1:4(G:61)	Psychology development of the child	155.413
S0aQ	Psychology and religion	200.19
0111,2J64,1:g	Psychology of King lear	822.33T3-4
G:55955	Radio biology	574.1915
L25:4725:63129	Radiumtherapy of intestinal concer	616.9943406423
KZ541(L25):4725:63129	Radiumtherapy of intestinal cancer of a dog	636.708969943406423

U2855.42'N5	Rain fall in Japan brought upto 1950	551.6552
V73x	Readings in American history	973.8
U(Y33).44	Reading in Geography of urban regions of India	915.409732
Y73(P142):1	Reading in Russian civilzation	910.039171 OR 914.7069171
Y:4355:67.4454	Relief measures for flood effected people of Orrisa	361.52095413
Q	Religion	200
D65,43:85	Repair of Radio	621.38418
X72.44'N56t	Report of the Indian taxation enquiry committee in 1956	336.200954045
I,14:2f.4451'N7	Research of morphology of the stems in Pusa Institute New Delhi in 1970	581.495095456046
Y31:7:7	Rural Development	301.35
2:97p49F,N6t4	Seminar on scientific documentation South and South East Asia held in New Delhi in 1901, a Survey in 1963	029.7
A0bHZ	Science for mines	622
R5	Science of Aesthetic	111.85
015,2D40,1	Shakuntla	891.22
M73:7	Silk weaving	677.02824 OR 677.39
M73:7.443694'N7	Silk weaving industry in Jullundur	677.39095455
S8	Social Psychology	301.1
SZ	Social Science	300
YZ.56'N	Social welfare in Great Britain in the twentieth century	360.942082 (16th ed.) 361.942082 (18th ed.)
X	Sociology	301
Aw	Sons of Science	925

C56:3	Spectroscopy of Infra-red rays	535.842
X:979D	Strikes	331.892
I95121:6	Study in genetics of desert plants	581.152 OR 581.5265
S1:52	Study of emotion in children	136.73 (16th ed.) 155.4
L192:4:7	Surgery of Arthritics	617.472
K96y3.4	Synopsis of the birds of India and Pakistan together with those of Nepal, Sikhim, Bhutan and Srilanka	598.295
U.440b192	Tarried zones of India	915.40093
T2:3(B).4445	Teaching of Mathematics Higher secondary schools of Nepal	373.5426 OR 510.7125426
T2:3.433	Teaching technique of higher Secondary schools of Thialand	373.593
F	Technology	660
D65,45	Television	621.388
E:3	Text book of analytical chemistry	543
S:72	Test and measurements (Book deals with psychology)	153
K86	Text book of entymology	595.7
L:2	Text book of human Anatomy	611
B75	Text book of Hydro-mechanic	532.1
B335	Text book of integral differential equation	515.38 OR 517.38 (Previous ed.)
I:8	Text book of Paleobotany	561
KZ:4:6	Text book of Veternary Science	636.089
C4:7	Thermodynnamics	536.7
E:(C)	Topics in chemical physics	539

X:97D	Trade Union	331.88
D66,3	Transformation of electricity	621.3126
Q1:340j366	Transmigration of soul according to Hinduism given in Vedias	294.523
V44:1944Q7,(Z:3)'N72	Treaties between India and Pakistan in 1972	341.0266540549
KZ541(L82):421:6	Treatment of tuberculous of a bone of a dog	636.7089699571
L45:421:6	Treatment of tuberculous of lungs	616.99524
KZ442,(L45): 421:6	Treatment of tuberculous of lungs of a horse	636.1089699524
M	Useful Arts	700
TN3	Wardha system of education	371.4
K7:345.4431	Water fasting on the part of Mallusca in the Bombay state in 1972	594.60954792
Y	What is sociology	301
Wn4452,N	Who's Who in U.P, legislature council	328.542092
X.1v	Worldly philosophers : the great economic thinkers (History of Economic)	330.09
P111,9D56175	Yorkshire dialect	427.74
K	Zoology	590

BIBLIOGRAPHY

1. Batty, C.D. : An Introduction to the Colon Classification
2. —do— —do— Dewey Decimal Classification.
3. A Dewey Decimal Classification from 13th ed. to 18th ed.
4. Harrod, H.M. Comp. : Librarian's Glossary.
5. Kaula, P.N. ed : Library Science to-day.
6. Landau : Encylopaedia of Librarianship.
7. Mills : Modern Outlines of Library Classification.
8. Olding, R.K. ed. : Readings in Library Cataloguing.
9. Parki, R.S. : Decimal Classification and Colon Classification in perspective.
10. —do— : Library Classification.
11. Dr. Ranganathan, S.R. : Colon Classification. Ed. 2.
12. —do— : —do— Ed. 6 reprint. with amendments.
13. —do— : A descriptive account of Colon Classification.
14. —do— : Elements of Library Classification.
15. —do— : Library Manual.
16. —do— : Prolegomena to Library Classification.
17. Sayers, Werwick : Manual of Classification.
18. Sengupta and Ohdedar : Library Classification.
19. Srivastava, Anand P. ; Theory of Knowledge Classification in Libraries.
20. Webster's Third New International Dictionary.

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BIBLIOGRAPHY

1. Batty, C.D. : An Introduction to the Colon Classification
2. —do— — do— Dewey Decimal Classification.
3. A Dewey Decimal Classification from 13th ed. to 18th ed.
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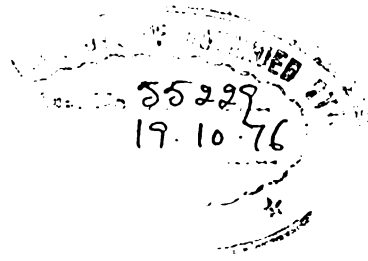

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