

SEM: 2ND
SUB: LIBRARY CLASSIFICATION-II

Unit 1 Detailed study of Colon Classification

- **Colon Classification (CC)**
- **1. Introduction**
- **Colon Classification (CC)** is a *faceted classification system* developed by S. R. Ranganathan in **1933**. It is considered one of the most intellectually sophisticated library classification systems in the world.
- It is called *Colon Classification* because the **colon (:)** is used as a principal facet indicator to connect different facets in a class number.
- CC is based on:
- **Analytico–synthetic principle**
- **Faceted classification theory**
- **Fundamental Categories (PMEST)**

- **First Edition – 1933**
- This was the first time Colon Classification was published.
- It introduced the faceted method of classification.
- The colon (:) was used to connect subjects.
- **Second Edition – 1939**
- Some improvements were made.
- More subjects were added.
- The structure became clearer.

- **Third Edition – 1950**

- Major revision.
- The theory became stronger.
- The idea of Fundamental Categories (PMEST) became clearer.

- **Fourth Edition – 1952**

- Further improvements in structure.
- Some changes in notation.
- More detailed rules were added.

- **Fifth Edition – 1957**

- Phase relations were better explained.
- More expansion of subjects.
- System became more practical

- **Sixth Edition – 1960**
- Very important edition.
- Detailed rules for classification.
- Widely used in Indian libraries.
- **Seventh Edition – 1987**
- Last and final edition.
- Most complete and advanced version.
- Published after a long gap of 27 years.
- **Main Classes**
- There are **42 main classes**

- **Mnemonics** are devices or techniques used in a classification scheme to make the notation meaningful, logical, and easy to remember by showing a relationship between the symbol used and the subject represented.
- **1.Verbal Mnemonics**
- **2.Scheduled Mnemonics**
- **3.Seminal Mnemonics**

Unit 2

Eight Steps of Library Classification in Colon Classification

Developed by Dr. S. R. Ranganathan

- **Introduction**
- Colon Classification is an analytico-synthetic system of classification developed by Dr. S. R. Ranganathan. It follows a systematic intellectual process to move from the natural language of a document title to a precise synthesized class number. The following steps explain this process in detail.
- **Step0: Raw Title**
- The Raw Title is the title exactly as it appears on the document. It may contain decorative words, vague expressions, or incomplete subject information. This is the starting point of classification.
- **Step 1:. Full Title**
- The Full Title is prepared after consulting
 - the preface,
 - introduction,
 - table of contents,
 - and other parts of the document.
- It clarifies the real subject and removes ambiguity.
- **Step2 :. Kernel Title**
- The Kernel Title is the condensed version of the full title.
- It removes unnecessary words and keeps only the essential subject concepts. It represents the core subject of the document.

- **Step 3 : Analysed Title**

- In this step, the Kernel Title is broken into facet components using the PMEST formula:

- P (Personality), M (Matter), E (Energy), S (Space), and T (Time). This stage is called subject analysis.

- **Step 4 :Transformed Title**

- The analysed facets are rearranged into the standard PMEST citation order.
- Even if the title presents them differently, they must follow the prescribed sequence for uniformity.

- **Step 5 :Title in Standard Terms**
- Natural language terms are replaced with standardized terminology as given in the Colon Classification schedules. This ensures consistency and avoids synonym confusion.
- **Step 6 :Title in Facet Numbers**
- Each standardized term is converted into its corresponding notation number from the schedules. These numbers represent individual facet components.
- **Step 7 : Synthesized Class Number**
- The facet numbers are combined according to the rules of Colon Classification using appropriate connecting symbols. The final number is synthesized and not merely copied from a list.
- **Step 8 : Verification by Reverse Translation**
- The synthesized class number is translated back into words to verify accuracy. If the reverse translation does not correctly represent the subject, corrections are made.

- MCQs on 8 Steps of Colon Classification
- 1. The first step in Colon Classification process is:
 - A. Kernel Title
 - B. Analysed Title
 - C. Raw Title
 - D. Transformed Title
 - ☒ Answer: C. Raw Title
- 2. The Raw Title refers to:
 - A. Standardized subject heading
 - B. Title exactly as printed on the book
 - C. Rearranged title in PMEST order
 - D. Classified title
 - ☒ Answer: B. Title exactly as printed on the book

- 3. The Full Title is prepared after consulting:
- A. Classification schedule only
- B. Dictionary
- C. Preface and table of contents
- D. Accession register
- ☒ Answer: C. Preface and table of contents
- 4. The Kernel Title represents:
- A. Expanded explanation of subject
- B. Core subject after removing unnecessary words
- C. Notation form
- D. Bibliographic entry
- ☒ Answer: B. Core subject after removing unnecessary words
- 5. Breaking the title into PMEST facets is done in which step?
- A. Raw Title
- B. Analysed Title
- C. Synthesized Title
- D. Standard Term
- ☒ Answer: B. Analysed Title

- 6. PMEST stands for:
- A. Place, Matter, Energy, Subject, Time
- B. Personality, Matter, Energy, Space, Time
- C. Personality, Method, Energy, Space, Topic
- D. Property, Matter, Edition, Space, Time
- ☒ Answer: B. Personality, Matter, Energy, Space, Time
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- 7. Rearranging facets into correct citation order is called:
- A. Standardization
- B. Analysis
- C. Transformation
- D. Synthesis
- ☒ Answer: C. Transformation
- 8. Replacing natural language with controlled vocabulary is known as:
- A. Kernel Title
- B. Standard Terms
- C. Facet Numbers
- D. Reverse Translation
- ☒ Answer: B. Standard Terms
- 9. Converting subject terms into notation numbers is called:
- A. Transformed Title
- B. Raw Title
- C. Title in Facet Numbers
- D. Full Title
- ☒ Answer: C. Title in Facet Numbers
- 10. The final constructed number in Colon Classification is:
- A. Enumerated Number
- B. Accession Number
- C. Synthesized Class Number
- D. Call Number
- ☒ Answer: C. Synthesized Class Number

- 11. Reverse Translation is used to:
- A. Expand the title
- B. Check correctness of class number
- C. Assign accession number
- D. Arrange shelves
- ☒ Answer: B. Check correctness of class number
- 12. Colon Classification is called:
- A. Enumerative system
- B. Alphabetical system
- C. Analytico-synthetic system
- D. Chronological system
- ☒ Answer: C. Analytico-synthetic system
- 13. Which step ensures that synonym confusion is avoided?
- A. Raw Title
- B. Kernel Title
- C. Title in Standard Terms
- D. Reverse Translation
- ☒ Answer: C. Title in Standard Terms
- 14. The 8-step method emphasizes:
- A. Mechanical arrangement
- B. Subject analysis
- C. Alphabetical listing
- D. Shelf numbering
- ☒ Answer: B. Subject analysis

- **1. Introduction to Colon Classification**
- Colon Classification is an analytico-synthetic system of library classification developed by Dr. S. R. Ranganathan in 1933. It revolutionized library classification by introducing a scientific method of subject analysis. Unlike enumerative systems that list subjects in advance, Colon Classification allows the construction (synthesis) of class numbers by analyzing a subject into its component facets.
- The foundation of this system lies in the concept of Fundamental Categories, popularly known as PMEST. These categories provide a universal framework for breaking down any subject into logical components.
- **2. Historical Origin of Fundamental Categories**
- Ranganathan developed the concept of Fundamental Categories after observing the rigidity of existing systems like Dewey Decimal Classification and Library of Congress Classification. He realized that knowledge is dynamic and multidimensional. New subjects constantly emerge, and no enumerative system can anticipate all combinations.
- To solve this problem, he introduced five universal categories that can accommodate infinite subject combinations. These are Personality, Matter, Energy, Space, and Time.

- **. Detailed Study of PMEST**
- **4.1 Personality (P)**
- Personality is the focal subject or main entity under discussion. It is the most specific and concrete element. It gives identity to the subject and is often the most difficult category to identify.
- Examples: Wheat in agricultural studies; Children in pediatric medicine; Rural Women in education studies.
- Characteristics of Personality:
 - Represents the core subject.
 - Individualizes the class number.
 - Usually comes first in citation order.
 - May appear in multiple layers (compound personalities).

- **4.2 Matter (M)**

- Matter refers to the substance, property, or material aspect of the Personality. It describes what the Personality is made of or its attributes.
- Examples: Steel in bridge construction; Protein in milk studies; Psychological traits in behavior analysis.
- Characteristics of Matter:
 - Modifies Personality.
 - Represents physical or abstract properties.
 - Adds descriptive precision.

- **4.3 Energy (E)**

- Energy represents action, operation, process, or method applied to or performed by the Personality. It gives dynamic character to the subject.
- Examples: Teaching, Treatment, Analysis, Prevention, Development.
- Characteristics of Energy:
 - Represents verbs converted into noun form.
 - Indicates change or movement.
 - Essential for research-oriented subjects.

- **4.4 Space (S)**

- Space refers to geographical location. It localizes the subject and provides regional context.
- Examples: India, Punjab, Delhi, Asia.
- Characteristics of Space:
 - Comes after Energy in citation order.
 - Derived from geographical tables.
 - Important in social sciences and history.

- **4.5 Time (T)**

- Time indicates chronological aspect or historical period. It situates the subject within temporal framework.
- Examples: 21st Century, Medieval Period, Post-1991 Era.
- Characteristics of Time:
 - Comes last in citation order.
 - Important in history and economics.
 - Often represented by apostrophe symbol.

- **5. Connecting Symbols in Colon Classification**

- Colon Classification uses specific symbols to connect facets:
 - : (Colon) – Connects different fundamental categories.
 - , (Comma) – Connects isolates within same facet.
 - ; (Semicolon) – Connects sub-facets.
 - ' (Apostrophe) – Indicates Time.
 - . (Dot) – Indicates geographical division.

- **6. Citation Order**

- The correct citation order is: Personality → Matter → Energy → Space → Time. Even if the subject appears differently in natural language, it must be rearranged into PMEST order.

- **7. Importance and Significance of PMEST**

- The introduction of Fundamental Categories made Colon Classification flexible and future-oriented. It allows infinite subject combinations and supports interdisciplinary research. It influenced modern faceted classification and metadata systems.

- **9. Multiple Choice Questions (MCQs)**

- 1. PMEST stands for:
A. Place, Matter, Energy, Subject, Time
B. Personality, Matter, Energy, Space, Time
C. Property, Method, Energy, Space, Topic
D. Personality, Method, Edition, Space, Time
Answer: B

- 2. Which category answers the question 'Who or What?'
A. Matter
B. Energy
C. Personality
D. Time
Answer: C

- 3. Action or process belongs to:
A. Matter
B. Energy
C. Space
D. Time
Answer: B

- 4. Geographical location is represented by:
A. Time
B. Energy
C. Space
D. Matter
Answer: C

- 5. Chronological aspect belongs to:
A. Personality
B. Matter
C. Space
D. Time
Answer: D

Unit 4
COMMON ISOLATES IN COLON CLASSIFICATION

- **Definition of Isolate**
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- An isolate is a single concept separated from a compound subject during analysis, which cannot stand independently and must be attached to a main subject to form a complete class number.
- When a subject is broken into parts (analysis), each part is called an isolate.
- It is not a complete subject by itself.
- It modifies or qualifies the main subject.
- Example
- Title: “History of Education in India”
- Analysis:
- Education → Main Subject
- History → Isolate
- India → Isolate
- Here:
- “History” and “India” cannot stand alone.
- They must be attached to “Education”.
- Therefore, they are called isolates.

Common Isolates

- Common isolates are those isolate ideas in Colon Classification which are general in nature, repeatedly used across various subjects, and capable of being attached to a wide range of main classes, thereby enabling systematic, flexible, and uniform synthesis of class numbers in accordance with the analytico-synthetic principles laid down by Ranganathan.
- In Colon Classification, a compound subject is analysed into its component concepts. Each separated concept is called an isolate. Among these isolates, certain concepts are not confined to a single subject but recur across many disciplines. Such widely applicable, repetitive, and general concepts are known as Common Isolates.
- They are “common” because:
 -
 - They can be used with almost all main classes.
 - They represent general characteristics like place, time, form, process, material, or group of persons.
 - They are listed separately in the schedules.
 - They have fixed and uniform notation.
 - They assist in the analytico-synthetic construction of class numbers.

- ¢ Kinds: In CC- 6 common isolates are divided into the following kinds:
 - 1. Anteriorising common isolates (ACI)
 - 2. Posteriorising common isolates (PCI)
- 1. Anteriorising common isolates (ACI):
 - The word anteriorising means “placed in front.”
 - In Colon Classification, some common isolates are cited before the main subject while constructing the class number. Such isolates are called Anteriorising Common Isolates (ACI).
 - They usually represent the form of the document rather than the subject content.
 - A common isolate attachable to host class number directly without a connecting symbol is an

- Kinds of ACI:
- a) (ACI) applicable before space facet
- b) (ACI) applicable only after space facet
- c) (ACI) applicable only after time facet

- Examples: (ACI) before space facet
- ¢ Bibliography of Library Science
- 2a
- 2 – Main Class (Library Science)
- a – bibliography from common isolate
- ¢ Encyclopaedia of sports (India, 1947)
- MYk44,N47
- M – Main Class (Useful Art)
- MY – Sports
- k – encyclopedia from CI
- 44 – India from space isolate
- N47 – 1947
- ¢ Biography of SR Ranganathan (1893)
- 2wM92
- 2 – Main Class (Library Science)
- w – Biography from CI
- M92 – 1892
- ¢ States man year book, UK, 1868
- n56,M68
- n – Serial (Main Class) from CI
- 56 – UK from space isolate
- M68 - 1868

- y7 case study: following cases we should apply y7:
- ¢ The class number for the biography of a person whose importance is due to the part played by him in the development of the history of a geographical area by adding (ACI) number 'y7'
- ¢ The biography of a person, whose importance is due mainly to his association with some other person of importance, either as a relative or as a friend, or in any other manner, is to be given the class number of the biography of that person of importance.
- ¢ Examples:
- ¢ Biography of Jawaharlal Nehru
- V44y7M89
- V- Main class (History)
- 44 – India
- y7 – Biography
- M89 – 1889
- ¢ Biography of Morarji Desai (born in 1896)
- V44y7M96
- V- Main class (History)
- 44 – India
- y7 – Biography
- M96 - 1896
- Example : ACI (applicable after space facet)
- ¢ Report of the reserve bank of India for 1990
- X621.44r'N90
- X – Main Class (Economics)
- 621 – Reserve bank
- 44 – India
- r – Report (from CI)
- N90 – 1990

- Example : ACI (applicable after Time facet)
- ¢ Roberts Committee report on public libraries in Great Britain (committee appointed in 1959)
- 22.56'N59t
- 2 – Main Class (Library Science)
- 2 – Public library
- 56 - Great Britain
- N59 – 1959
- t – Commission report (from CI)
- ¢ Indian trade union: a survey conducted in 1966
- X:97D.44'N66t4
- X – Main Class (Economics)
- 97D – Trade union
- 44 – India
- N66 – 1966
- t4 – Survey (from CI)

Posteriorising Common Isolates (PCI):

- 2
- A posteriorising isolate is a common isolate which, when synthesized with a main subject, is placed after (posterior to) the main class number in the notation.
- The word posteriorising means “placed behind” or “after.”
- In Colon Classification, most common isolates such as Space and Time are added after the main subject. These are called Posteriorising Common Isolates (PCI).
- They usually modify the content of the subject, not the physical form of the document.
- ¢ A PCI when added to the class number of a document gives it, unlike the ACI, a posterior position over the documents with the same class number. In other words, a document fitted with a PCI will be shelved after the documents on the same subject.
- ¢ Like the ACI the PCI are also represented by the Roman smalls.
- ¢ The connecting symbols or indicator digits for each of the two kinds of PCI are different, but are the
- same as for the isolates belonging to Energy and Personality facets. In other words, a “:” (Colon) for the energy PCI and a “,” (Comma) for the Personality PCI are used as Connecting symbols.
- ¢ Kinds: In CC - 6 PCI are of the two kinds:
- a) Energy PCI
- b) Personality PCI

- a) Energy PCI: The Energy include such concepts as calculating, designing, measuring, weighing,
- investigation, experiment, discussion, criticism, drafting, reporting etc. All these and others are connected after the appropriate class number with the help of the connecting symbol “:” (Colon)
- Examples of Energy PCI:
- ¢ Calculating the income tax of the salaried class
- X724:99N:b1
- X – Main class (Economics)
- 724 – income
- 99N – salaried
- b1 – Calculating (from CI)
- ¢ Observing migratory birds
- K96:58:f2
- K – Main class (Zoology)
- 96 – birds
- 58 – migratory
- f2 – observing

Unit 5
MNEMONICS IN COLON CLASSIFICATION

- **Introduction**
- One of the most scientific features of Colon Classification is the use of mnemonics.
- Ranganathan designed CC in such a way that notation should be:
 - Logical
 - Systematic
 - Easy to remember
 - Helpful in locating related subjects
 - Mnemonics help in achieving this goal.
- **Definition of Mnemonics**
- Mnemonics are devices or techniques used in a classification scheme to make the notation meaningful, logical, and easy to remember by showing a relationship between the symbol used and the subject represented.
- In simple words, mnemonics are memory aids used in classification.
- Purpose of Mnemonics in CC

- **Mnemonics are used to:**
- Help librarians remember class numbers
- Maintain consistency in notation
- Show logical relationship between subjects
- Reduce confusion
- Facilitate easy shelf arrangement
- Improve user convenience
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- **Types of Mnemonics in Colon Classification**
- Ranganathan described mainly three types of mnemonics:
- **1.Verbal Mnemonics**
- **2.Scheduled Mnemonics**
- **3.Seminal Mnemonics**

- **1. Definition Verbal Mnemonics**

- Verbal Mnemonics is the practice of using the first letter (or initial group of letters) of the name of an entity as its isolate number.
- In Colon Classification, this is codified as the Alphabetical Device. It is used when no other logical, evolutionary, or chronological sequence can be easily applied to a set of isolates. It relies on the "verbal" name of the object to provide a memory aid for the classifier and the user.

- **. When to Use Verbal Mnemonics**

- According to the Canon of Alphabetical Mnemonics, this device should only be used in specific circumstances:
- When explicitly directed: The CC schedules will often say "To be divided by Alphabetical Device."
- As a last resort: When there is no helpful sequence (like "Increasing Complexity" or "Spatial Contiguity") that makes sense for the items.
- For International/Proper Names: For brands, specific cultivars of plants, or individual named entities.

- **3. Rules of Application**

- To ensure the notation remains clear, Ranganathan established a few ground rules for using the Alphabetical Device:

- 1.Capital Letters: The first letter of the name must be written in Capital Roman Letters.
- 2.Ambiguity Resolution: If two entities in the same facet start with the same letter (e.g., "Apple" and "Apricot"), the classifier uses the first two letters, or even three, to distinguish them (Ap, Apt).

- **Example**

- **Subject,Base Number,Entity to Classify,Resulting Class Number**

- **Agriculture (J),"J,381 (Rice)",Basmati Rice,"J,381:B"**
- **Engineering (D),D5125 (Cycle),Hero Bicycle,D5125:H**
- **Medicine (L),"L,45 (Lungs)",Penicillin (as a drug),L:642:P**
- **Useful Arts (M),M7 (Textiles),Nylon,M7:N**

2 . Definition Scheduled Mnemonics

- Scheduled Mnemonics refer to the practice of using the same digit or digit-group to represent the same concept across different schedules (subjects) within the classification scheme.Categories of Scheduled Mnemonics
- Scheduled Mnemonics are primarily found in three areas of Ranganathan's system:
 -
 - **A. Common Isolates (CI)**
 - The lowercase letters used for forms of documents are the ultimate scheduled mnemonics.
 - k is always Encyclopedia (e.g., Bk is Math Encyclopedia, Ck is Physics Encyclopedia).
 - m is always Periodical (e.g., Lm is Medical Journal, Tm is Education Journal).
 - **B. Space Isolates**
 - The geographical schedule is a massive exercise in scheduled mnemonics.
 - 44 = India 56 = Great Britain 73 = United States
 - These digits remain identical whether you are classifying "History of India" (\$V,44\$), "Education in India" (\$T,44\$), or "Flora of India" (\$I,44\$).
 - **C. Language Isolates**
 - The numbers assigned to languages are consistent across the "Linguistics" (\$P\$) and "Literature" (\$O\$) schedules.
 - 111 = English
 - 15 = Sanskrit
 - 152 = Hindi
 - Example: \$O111\$ is English Literature; \$P111\$ is English Linguistics.

- **3.Seminal mnemonics**

- Ranganathan made a deep study of mnemonics and makes use of them in his CC:
- The digit 1 is used as mnemonic for unity, God, world, the first in evolution or time, one dimension or line, solid state,
- The digit 2 is used as mnemonic for two dimensions, plane, conics, form, structure, anatomy, morphology, sources of knowledge, physiographic, constitution, physical anthropology
- The digit 3 is used for mnemonic for three dimensions, space, cubic, analysis, function, physiology, syntax, method, social anthropology,
- The digit 4 is used as mnemonic for heat pathology, disease, transport, interlinking, synthesis, and hybrid, salt
- The digit 5 is used as mnemonic for energy, light, radiation, organic, , liquid, water, ocean, foreign land, alien, external, environment, ecology, public controlled plan, emotion, foliage, aesthetic, woman, sex, crime
- The digit 6 is used as mnemonic dimensions, subtle, mysticism, money, finance, abnormal, phylogeny, evolution
- The digit 7 is used as mnemonic for personality, ontology, integrated, holism, value, public finance,
- The digit 8 is used as mnemonic for travel, organization, and fitness.