

BUREAU OF INDIAN STANDARDS

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Draft Indian Standard

Part 1 General Drafting and Editorial Practices

(Fifth Revision of IS 12)

Documentation and Information
Sectional Committee, MSD 05

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FOREWORD

(Formal clauses to be added later)

The object of this standard is to ensure uniformity in the style and presentation and to develop a standard practice in the drafting of specifications, test methods, Codes of practice, guides, reports and similar other documents published by the Bureau of Indian Standards. Even though the prime object in preparing this guide has been to meet the specific needs of BIS, the guide may also be found useful by writers and authors as well as other organizations engaged in similar activity.

This standard was originally issued in 1949, for the guidance of Sectional Committees, Subcommittees, Panels and staff of BIS entrusted with the task of drafting, editing and publishing Indian Standards, technical reports and other publications. It was subsequently revised in 1958, 1964 1988 and 2005.

The revision has been taken up in order to update the standard in the light of experience gained in its usage since its last revision and to align it with the latest practices being followed in this field at the international level.

In preparing this standard considerable assistance has been derived from the following publications:

ISO/IEC Directives Part 1:2023 Procedures for the technical work

ISO/IEC Directives Part 2:2001 Rules for the structure and drafting of international standards

ISO/IEC Guide 21-1:2005 Regional or national adoption of International Standards and other International Deliverables Part 1: Adoption of International Standards

ISO/IEC Guide 21-2:2005 Regional or national adoption of International Standards and other International Deliverables Part 2: Adoption of International Deliverables other than International Standards

BSI 0 : 2021 A standard for standards - Principles of standardization

1 SCOPE

1.1 This Indian Standard (Part 1) provides guidance on drafting and presentation including editorial practices to be followed in the preparation of Indian Standards and Special Publications.

1.2 Guidance for adoption of International Standards as Indian Standards and special publication are covered in part 2 and 3.

NOTE - This standard does not provide guidance on the process and procedure by which Indian Standards and Special Publications are developed

2 REFERENCES

The Indian Standards listed in Annex A contain provisions which, through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed in Annex A.

3 TERMINOLOGY

For the purpose of this standard the following definitions shall apply.

3.1 International Standard — Standard that is adopted by an International standardizing/standards organization and made available to the public.

NOTE — International standard where the International standards organization is ISO or IEC

3.2 Regional Standard — Standard that is adopted by a regional standardizing/standards organization and made available to the public.

Examples:

Standards published by SARSO, PASC, CEN, CENELEC

- 1) SARS 0006 : 2017 Biscuits — Specification
- 2) SARS 0008 : 2017 Refined sugar — Specification

3.3 National Standard — Standard that is adopted by a National standards body and made available to the public.

3.4 Adoption of an International Standard as a National Standard — Publication of a National normative document based on a relevant International Standard, or endorsement of the International Standard as having the same status as a national normative document, with any deviations from the International Standard identified.

3.5 Editorial change (of an International Standard in a regional or National standard) — Any permitted change that does not alter the technical content of the standard.

Examples:

- 1) corrections of any misprints (that is spelling errors) or pagination changes;

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- 2) changes to the title to be consistent with an existing National Standard;
- 3) inclusion of any regional or National informative material (for example, informative annexes that do not alter, add to or delete from the provisions of the International Standard); examples of informative material are advice to users, training guidance or suggested forms or reports; and
- 4) deletion of informative preliminary material from the International Standard.

NOTE — Any changes in document layout (for example in relation to pagination, font type and font sizes etc) especially in an electronic environment, have no impact on the degree of correspondence.

3.6 Technical deviation (of an International Standard in a National Standard) — Difference between the technical content of the International Standard and that of the regional or National Standard.

NOTE — Limitation of the scope of the standard is considered to be a technical deviation.

4 GENERAL GUIDANCE FOR DRAFTING AND EDITORIAL PRACTICES

4.1 In preparing a standard, care shall be taken to ensure that the standard is not at variance with the contents of Indian standards already published. In case, for sound reasons, changes become necessary, action shall be initiated to examine the possibility of reconciling the differences. In case if it is not possible to reconcile, the differences shall be specified.

4.2 Standards shall be so worded that it is possible to use them as a basis of contract, but should not normally include contractual clauses of a non-technical character.

NOTE — In certain standards, it becomes necessary to retain certain number of provisions of a non-technical character, such as inspection clauses, delivery of goods, etc. In so far as they are related to the determination of quality of goods, they may be retained, if considered desirable.

4.3 Consistency should be maintained within each standard, and within a series of associated standards with respect to the following:

- a) The structure of associated standards and the numbering of their clauses should, as far as possible, be identical;
- b) Identical wording should be used to express identical provisions; and
- c) The same terminology should be used throughout. The use of synonyms should be avoided.

4.4 Standards should avoid duplication. This is particularly important in test methods which are often applicable to more than one product, or type of product.

4.4.1 If a test method is, or is likely to be, applicable to two or more types of product, a standard shall be prepared on the method itself, and each standard dealing with a given product shall refer to it (indicating any modifications that could be necessary). This will help to prevent unnecessary deviations.

4.4.2 Before standardizing any item or subject, it shall be determined whether an applicable standard already exists. If it is necessary to invoke a requirement that appears elsewhere, this should be done by reference, not by repetition. If it is considered necessary to repeat a

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requirement from an exterior source, its source shall be referenced precisely, keeping in view the provisions of copyright act.

4.4.3 As far as possible, the requirements for one item or subject should be confined to one standard. In some fields it can be desirable to write a standard specifying generic requirements applicable to a group of items or subjects.

5 CLASSIFICATIONS AND SUBDIVISION

5.1 Classification

5.1.1 Series

There are two separate series of technical publications issued by Bureau of Indian Standards, the general series of Indian Standards which uses the prefix IS and a series of Special Publications which uses the prefix SP.

NOTE — Wherever the term ‘standard’ appears, the requirement mentioned therein also applies to special publication.

5.1.2 Designation of Publications

Both general series and the special series of publications should be designated with the help of sequential numbers prefixed by IS or SP, as the case may be, followed by the year of publication. The prefix and the number shall be separated by a single space and the number and the year shall be separated by a colon. There shall be a single space before and after colon.

Example:

IS 21 : 1992, IS 228 (Part 15) : 1992, IS 302 (Part 2/Sec 13) : 1994, SP 21 : 2005, SP 36 (Part 2) : 1988

5.1.2.1 The designation of the publication shall appear on each page, on the top right-hand corner of odd numbered pages and the top left-hand corner of even numbered pages. The number of a particular standard shall be retained in its successive revisions.

NOTE — A new number may, however, be necessary if a revision substantially alters the scope or contents of the previous version of the standard. Under these circumstances the original number shall be frozen.

5.2 Subdivisions of a Standard

5.2.1 Standards differ from one another in content, complexity and size. This clause describes the framework within which the content of most standards can be arranged in a consistent and logical manner, thereby aiding comprehension and facilitating reference to the text.

Care shall be taken that ideas having the same status are grouped/classified at the same level and that a given idea is not split into too many unnecessary subdivisions. However, not every standard contains all the degrees of subdivision described in **5.2.2** to **5.2.9**.

5.2.2 Part

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As a general principle, an individual standard shall be prepared for each subject to be standardized, and published either as a single standard or a single part of a series. Whenever required, Indian Standards may be published in parts. All the parts of an Indian Standard shall bear the same IS number. In such cases, each part shall carry the part number in Hindu-Arabic numerals in both the designation and the title. Subtitles shall be given for each part. The designation 'Part' should not normally be used as an internal subdivision of a standard.

Example:

IS 397 (Part 1) : 2003 Methods for statistical quality control during production : Part 1 Control charts for variables (*second revision*)

If a standard is subdivided in a number of separate parts, the first part should include an explanation of the intended structure in its foreword. While developing a series, consider reserving Part 1 for general aspects such as vocabulary.

There are two main ways of subdividing subject matter within a series of parts:

1. Each part deals with a specific aspect of the subject and can stand alone:

Example:

Part 1 : Vocabulary

Part 2 : Requirements

Part 3 : Test methods

2. There are both common and specific aspects to the subject. The common aspects shall be given in Part 1. Specific aspects (which can modify or supplement the common aspects and therefore cannot stand alone) shall be given in separate individual parts.

Example:

IS 2095 (Part 1) : 2011 (Gypsum plaster boards — Specification: Part 1 plain gypsum plaster boards)

IS 2095 (Part 2) : 2001 (Gypsum plaster boards — Specification: Part 2 coated/laminated gypsum plaster boards)

IS 2095 (Part 3) : 2018 [Gypsum plaster boards — specification: Part 3 Reinforced gypsum plaster boards, tiles, cornices and moldings (third revision)]

5.2.3 Section

5.2.3.1 A section may either be a portion of a part of a standard, of more limited scope than the part, or an internal subdivision of a standard. A section may also be an internal subdivision used to group a series of clauses to indicate a special relationship between the clauses grouped in this way. The number of the section shall be written in Hindu-Arabic numerals preceded by the word 'SECTION', for example, 'SECTION 1'. Each section shall have a subtitle. Items in a standard containing sections shall be numbered sequentially irrespective of the subdivision into sections.

5.2.3.2 In cases where the section is a separately published portion of a part of a standard, each publication should carry the part number and the section number in Hindu-Arabic numerals in both the designation and the title. It is also necessary to give a separate subtitle for each section below the subtitle of the part.

Example:

IS 101 (Part 1/Sec 8) : 2015 Methods of sampling and tests for paints, varnishes and related products : Part 1 Test on liquid paints (General and Physical), Sec 8 Pigments and extenders — Determination of pH value of an aqueous suspension

5.2.4 *Item*

It is a major subdivision of the subject matter of a standard. All items shall be numbered sequentially with Hindu-Arabic numerals starting from 1. Each item shall have its title placed after the number. Any text following the item title shall be placed in the line below it.

5.2.5 *Clause*

5.2.5.1 It is a subdivision of the item, namely, a major aspect of the subject matter of the item meriting a separate identity. Clauses shall be numbered in Hindu-Arabic numerals and shall contain two numbers separated by a point, the first number being the number of the item and the second being that of the clause, numbered in consecutive order. If there is only one clause, then the clause number shall not be given. The digit '0' shall be used in a clause number when it is intended to give a general introduction to ideas expressed in the text that follows.

5.2.5.2 Each clause should preferably be given a title which shall be placed immediately after its number. If the clause contains any text, it shall be placed in the line below it.

NOTES

1. The use of title should preferably be consistent that is, all clauses within a given item should bear a title.
2. The term 'clause' may be used as a generic term while referring to an item, a clause, a subclause or a sub-subclause.
3. In case of chemical reagents and apparatus, half sentences to be started from the same line after inserting dash (—) next to title.
4. In case of terminologies, text to be started from same line after inserting dash (—) next to title.

5.2.6 *Subclause*

It is a subdivision of a clause, that is, an aspect of the subject-matter of a clause requiring separate treatment and identity. Subclauses shall be numbered in Hindu-Arabic numerals and shall contain three numbers separated by two points, the first two numbers being those of the item and clause respectively and the last one being that of the subclause numbered in consecutive order.

Each subclause should preferably be given a title which shall be placed immediately after its number. The textual matter shall be placed in the line below it in case the title is given. A subclause shall not be created unless there is at least one further subclause at the same level.

NOTES

1. In case of chemical reagents and apparatus, half sentences to be started from the same line after inserting dash (—) next to title.
2. In case of terminologies, text to be started from same line after inserting dash (—) next to title.

5.2.7 *Sub-subclause*

It is a subdivision of a subclause, requiring separate treatment and identity. It shall be numbered in Hindu-Arabic numerals and shall contain four numbers separated by three points, the first three numbers being those of the item, clause and subclause, respectively, and the last one being that of the sub-subclause, numbered in consecutive order. The textual matter shall be placed in the line below it in case the title is given. A sub-subclause shall not be created unless there is at least one further sub sub clause at the same level.

NOTES

1. In case of chemical reagents and apparatus, half sentences to be started from the same line after inserting dash (—) next to title.

Examples:

- a) Mixed Indicator — Mix two volumes of phenolphthalein solution with three volumes of thymol blue solution
 - b) Phenolphthalein, 1 g/l solution in 95 percent ethanol (v/v).
2. In case of terminologies, text to be started from same line after inserting dash — next to title.

5.2.8 *Paragraphs*

Paragraphs are unnumbered subdivisions of a clause, subclause, etc. subdivisions into paragraphs should be resorted to when other modes of subdivision are not available or appropriate. Paragraphs shall not have indents.

5.2.9 *Itemization*

For itemization within a clause, small letters, such as a), b), c) shall be used. Letters ‘I’, ‘l’, ‘o’, ‘v’ and ‘x’ shall not be used for this purpose. For further itemization, Hindu-Arabic numerals in parentheses, namely, 1), 2), 3), etc. shall be used. For still further itemization, i), ii), iii), etc. may be used.

Example:

- a).....
- b).....
 - 1).....
 - 2).....
 - i).....
 - ii).....
- c).....

5.2.10 *Annex*

Annexes are placed after the main body and suitable references to them shall be made in the text (*see 6.19*). All annexes shall be designated by capital alphabetical letters in one consecutive order, omitting I, O, V and X. The reference of the clause number(s) in which annex(s) has\have been referred shall appear in parentheses (the word ‘Clause’ in italics and clause number in Hindu Arabic and Bold below the designation of the annex. Each annex shall have a title and should be bold and first letter of each word in capital letters. The system for numbering subdivisions within the annex shall be the same as that used in the main body of the standard, with each number being preceded by the reference letter of the annex and hyphen.

Example:

- 1) **ANNEX A**
(Clause 2)
List of Referred Standard
- 2) **A-1, A-2, A-2.1, A-3.2.2** etc. (for Annex A)
B-1, B-3.2.1 etc. (for Annex B)

5.2.11 *Typographical Style for Subdivision within a standard*

Different styles to be used for division and subdivision of standard are given in Table 1.

Table 1
Typographical Styles of Divisions and Subdivisions
(Clause 5.2.11)

SI No.	English Term	Example of Numbering	Drafting Style of Title	Applicable Clause
(1)	(2)	(3)	(4)	(5)
i)	Title (First page and Cover Page)	IS 12 (Part 1) : 2021	भारतीय मानकों के मसौदे तैयार करने और उनकी प्रस्तुति की मार्गदर्शिका(पाँचवा पुनरीक्षण) Guide for Drafting and Presentation of Indian Standards (Fifth Revision)	-
ii)	Item	1	Bold and all capital	-
iii)	Clause	1.1	Title case and bold letters	-
iv)	Subclause	1.1.1	Title case and bold letters	-
v)	Sub-subclause	1.1.1.1	Title case and bold letters	-
vi)	Paragraph	[no number]	-	-
vii)	Annex	A	Bold and all capital	-
viii)	Composition	Last Annex	Bold and all capital	-
ix)	Index	No Annex numbering	IS 1275/ ISO 999	-
x)	Bibliography	No Annex numbering	As per IS 2381/ ISO 690	-

6 PRESENTATION

This clause gives guidance on sequence and presentation of the general elements of a standard.

6.1 Titles

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The wording of the title shall be established with the greatest care; while being as concise as possible, it shall indicate, without ambiguity, the subject-matter of the Indian Standard in such a way so as to distinguish it from that of other Indian Standards, without going into unnecessary details. Any necessary additional particulars shall be given in the 'Scope'.

The title shall be composed of separate elements, each as short as possible, proceeding from the general to the particular. In general, not more than the following three elements shall be used:

- a) An introductory element indicating the general field to which the Indian Standard belongs (this can often be based on the title of the committee);
- b) A main element indicating the principal subject treated within that general field; and
- c) A complementary element indicating a particular aspect of the principal subject or giving details which distinguish the standard from other Indian Standards, or other parts of an Indian Standard.

6.1.1 The introductory element is necessary if, without it, the subject indicated in the main element is not clearly-defined.

Example:

Correct: Fork-lift trucks — Hook-on type fork arms — Vocabulary

Incorrect: Hook-on type fork arms — Vocabulary

6.1.2 If the main element together with the complementary element of the title unequivocally covers the subject treated in the Indian Standard, the introductory element shall be omitted.

Example:

Correct: Sulphuric acid — Code of safety

Incorrect: Chemicals — Sulphuric acid — Code of safety

6.1.3 The complementary element is necessary if the Indian Standard covers only one or a few aspects of the subject indicated in the main element, or if it is necessary to distinguish it from another Indian Standard.

In the case of a standard published as a series of separate parts, the complementary element serves to distinguish and identify the parts (the introductory element and the main element remaining the same for each part).

Example:

IS 15027 Micrographics — Vocabulary:

(Part 1) : 2001 General terms

(Part 2) : 2001 Image positions and methods of recording

(Part 3) : 2003 Film processing

If the Indian Standard covers several aspects of the subject indicated in the main element, the aspects covered shall be referred to by a general term such as specification or mechanical requirements and test methods rather than be enumerated one by one.

The complementary element shall be omitted if the Indian Standard:

- a) covers all essential aspects of the subject indicated in the main element; and
- b) is (and is intended to remain) the only Indian Standard relating to this subject.

Example:

Correct: Electric food mixture — Specification

Incorrect: Electric food mixture — Terminology, symbol, material, dimensions, mechanical properties rated values, method of tests, packaging

6.1.4 *Avoidance of Unintentional Limitation of the Scope*

The title shall not contain details which might risk implying an unintentional limitation of the scope of the Indian Standard. However, if the Indian Standard pertains to a specific type of product, this fact shall be reflected in the title.

Example:

Microfilming of Technical Drawings and Other Drawing Office Documents: Part 3
Aperture Card for 35 mm Microfilm

6.2 Foreword

6.2.1 The Foreword is informative and shall not contain requirements, permissions or recommendations.

Foreword should contain such formal paragraphs as are relevant to the needs of a standard as suggested below:

- a) This Indian Standard was adopted by the Bureau of Indian Standard after the draft finalized by the ...Sectional Committee had been approved by theDivision Council'; and

NOTE — The words 'First Revision/Second Revision/Third Revision' shall be added, wherever applicable within parentheses after the words 'This Indian Standard'.

- b) In the formulation of this standard, assistance has been derived from the following publications.

6.2.2 Where appropriate, the foreword should also state the following:

- a) Origin of the request for standard;
- b) Brief history of the standard;
- c) Any special features in the standard;
- d) Other matters relevant to the standard, such as:
 - 1) Reference to closely related standard(s);
 - 2) Mention of optional clauses;
 - 3) Reference to any additional information given in an annex to which no reference appears in the body of the standard;
 - 4) Reference to statutory Regulations, Acts, Rules in the country, like the *Indian Electricity Rules, Indian Boiler Regulation, Standards for Weights and Measures Packaged Commodity Rules, etc.*
 - 5) Acknowledgement of the work done.
 - 6) Reference to annex for committee composition if included.

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- e) If the standard is a revision of an earlier version, the foreword shall also include reasons for revision, and reference to principal modifications with respect to the immediate previous version;
- f) Reference to clauses which call for agreement between the customer and the organization or which permit the customer to use his option for selection to suit his requirements or which require the customer to supply certain technical information at the time of placing orders, shall be included in the foreword;
- g) If there are number of Indian Standards on the subject and Indian Standard under reference is one of that series, this fact shall be mentioned in any of the following ways:

7) This standard (Part 1) is a part of IS __ series of standards under the general title ‘_____’. Other parts in this series are:

Part 2	Title
Part 3	Title

NOTE — When the list is given in the foreword, the listing shall be done without serial numbers in one sequence arranged in ascending order of their designation numbers, irrespective of the years of publication

8) This standard (Part 1) is a part of IS __ series of standards under the general title ‘_____’. Other parts in this series are given in annex.

NOTES

- 1. As a general guidance all important information included in the foreword should appear together for better readability .This should be considered while deciding on a separate annex for listing the other parts/section in the series.
- 2. This Annex shall be placed just before the annex for composition.

h) Correspondence with International standards:

In case an Indian Standard is modified to ISO/IEC standard, it shall be brought out in any of the following forms:

- 9) This standard is modified in relation to ISO/IEC designation and title ...’. However, there are technical deviations and the same have been clearly identified and explained below (or given in Annex....).

NOTES

1 “The Indian standard contains less”

The Indian standard only applies a subset of the available choices in the International Standard, has less stringent requirements, etc.

2 “The Indian standard contains more”

The Indian standard adds aspects or types, has more stringent requirements, includes additional tests, etc.

3 “The Indian standard alters a part of the International Standard”

Part of the content is identical, but both the Indian standard and the International Standard contain some differing requirements.

4 “The Indian standard provides an alternative choice”

The Indian standard provides a provision of equal status, which may be used as an alternative to that given in the International Standard.

10) The Indian Standard is not equivalent to the International Standard “ISO/IEC designation and title ...” in technical content and structure and the changes have not been clearly identified. This also can include the case where only a minority in number or significance of the International provisions remain in the regional or National standard.

This degree of correspondence does not constitute an adoption.

NOTE — To be added on the basis of IS 12 Part 2.

6.3 Table of Contents

Indian Standards may be provided with a table of contents wherever considered desirable. The table of contents should list, as appropriate, sections, items and annexes, with the titles in the same sequence as given in the text along with their page numbers. Subdivisions beyond the clause level should preferably not be included in the table of contents of a standard. It should appear before the foreword of the standard.

6.4 Scope

The scope of a standard or separately published part/section of a standard shall contain a clear statement indicating the field covered by it. If a standard is internally subdivided into sections, the scope covering all the sections shall be given once only.

The scope shall be in accordance with the title and technical contents of the standard. It shall define the extent and limitation of the standard. To avoid ambiguity in the interpretation of the scope, it is sometimes useful to state explicitly what is excluded. The scope clause should be sufficiently comprehensive and self-contained to convey the subject-matter of the standard. It shall be worded as a statement and shall not be used to specify any requirements. Forms of expression, such as the following may be used in drafting the scope:

“This Indian Standard (Part/Sec)

specifies/covers requirements,
dimensions.....,
describes methods of,
the manner in which,
establishes the nomenclature for,
a system for.....,etc.
gives rules for,
defines terms for.....,
provides guidance on,

6.5 References

6.5.1 The reference clause lists those standards which are cited normatively in the standard. Reference standards listed are not numbered.

6.5.2 Every standard shall include a list of standards, which have been referred in the text, with their designations and titles in the ascending order of their designations. Indian standards which are referred only in the foreword shall not be included under this clause. Informative references

shall be listed in bibliography. In such cases, the complete designation of the standards shall form part of the informative Annexes.

6.5.3 The following formal clause shall be given before listing the references:

“The Indian Standards given below (listed in Annex A) contain provisions which, through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards”

6.5.4 The following presentation style shall be adopted while giving the references:

- a) The first column shall be titled “Designation”. Complete designation of Indian Standard shall be given in this column.
- b) For special situations please *see* 7.3.2
- c) References should be listed in Annex if No. of references are more than 6 and/or if the list of references exceeds to second column

6.6 Terminology

6.6.1 Definitions of the terms shall be unambiguous, precise and given in descriptive form. Terms shall be listed in the alphabetical order or logical sequence as appropriate. The use of terminology and abbreviations used shall be consistent throughout the standard. All entries shall be numbered.

Only terms which are used in the standard should be listed in the terms and definitions clause. This rule does not apply to terminology standards, whose terms are intended for wider use.

The following formal clause shall be given before listing the terms and definitions:

- a) when a separate Indian standard on terminology exist:
 - 1) Technical terms used in the standard shall be those defined in relevant Indian Standard on terminology of the subject in question, if it exists. A reference should be made to it in the standard, prefaced by the words ‘For the purpose of this standard, the definitions given in IS..... Shall apply’.
 - 2) If in a standard, some of the terms used are those defined in the relevant Indian Standard on Terminology of a particular subject in question and certain additional terms are to be included in the standard, the terminology clause shall begin with the words ‘For the purpose of this standard, the definitions given in IS..... in addition to the following shall apply:’

NOTE — To make the standard self-contained, the definitions may be reproduced as far as practicable.

- b) when separate Indian standard on terminology does not exist:

If a separate standard on terminology of a particular subject is not available, then in such cases, definitions may be included in the standard under reference prefaced by the words ‘For the purpose of this standard, the following definition(s) shall apply’.

6.7 Symbols, Mathematical and Chemical Formulae

6.7.1 Symbols

If in a standard, large number of symbols are used in various formulae or otherwise in the main text, it may be desirable to list the commonly appearing symbols under clause on ‘Symbols’, which may read as follows:

‘For the purpose of this standard, the following letter symbols have the meaning indicated against each; other symbols used in this standard have been explained at appropriate places:’

Unless, there is a need to list symbols in specific order to reflect technical criteria, all symbols shall be listed in first alphabetical order of English language followed by other language symbols. In the list, if two symbols are represented by the same alphabet but in upper and lower cases, the upper case alphabet shall come first (A, α , B, b, β , D).

The same symbol should not be used to represent different quantities within the same standard. Subscripts can be useful to distinguish symbols for related concepts. Letters without indices preceding letters with indices and letter with indices preceding numerical ones (B, B_m, B_p, B₂, b).

Examples:

- A — Area
- b — Breadth of beam, or shorter dimension of a rectangular column
- D — Overall depth of beam or slab or diameter of column; dimension of a rectangular column in the direction under consideration
- D_f — Thickness of flange
- d — Effective depth of beam or slab
- d' — Depth of compression reinforcement from the highly compressed face

6.7.2 Mathematical Formulae

If needed for cross-referencing purposes, mathematical formulae should be numbered and should be referred to in the text of the standard. Hindu-Arabic numbers in parentheses shall be used, starting with 1. The numbering shall be continuous and independent of the numbering of clauses, tables figures, and annexes. Space to be added before and after mathematical operations. The formula should be center aligned. For any physical quantity, the symbol should be in italics and the rest should be normal.

Examples:

$$t = \frac{pd_i}{2fj-p}$$

where

- t* = shell thickness in mm;
- p* = design pressure in MPa;
- d_i* = inside diameter of the shell in mm;
- f* = design stress in MPa; and
- j* = joint factor

NOTE — If an equation is too long for the next line, break shall be made at +, =, <, -, *, and similar signs. The sign shall appear at the beginning of the second line.

$$f(x) = s[1 + \frac{1}{PD} \{E_1(b + x_2)\} X 4E_2(1 + x_3) + 4E_3(1 + x_4)]$$

6.7.3 Chemical Formulae

In the text, names of chemicals should be expressed, as far as practicable, in words, formula being given in parentheses, wherever necessary. Formulae may be used in tables or equations.

Examples:

Incorrect — Add 10 ml of H₂SO₄

Correct — Add 10 ml of Sulphuric acid.

6.8 Grades, Types and Classes

If grades, types and classes are to be separately specified, their designations should be included after terminology/ symbols.

6.9 Manufacture/Service Process

Wherever considered necessary the manufacturing/service processes may be specified.

6.10 Requirements

Requirements should be as self-contained, as possible.

6.10.1 Requirements should be given in formal table. Requirements shall state tolerances, where applicable.

Example 1:

Table 2
Requirements for Fortified Rice
(Clauses 4.1.2, 4.1.5 and 8.1)

SI No	Characteristics	Requirement		Method of Test, Ref to
		Milled Rice	Milled Parboiled Rice	
(1)	(2)	(3)	(4)	(5)
i)	Moisture content, percent by mass, <i>Max</i>	15.5	15.5	IS 4333 (Part 2)
ii)	Foreign matter ¹⁾			
	(a) Inorganic, percent by mass, <i>Max</i>	0.2	0.2	Annex A
	(b) Organic, percent by mass, <i>Max</i>	0.8	0.8	
iii)	Weevilled kernels, percent by mass, <i>Max</i>	5.0	5.0	IS 4333 (Part 1)

iv)	Heat – Damaged Kernels , percent by mass, <i>Max</i>	5.0	8.0	IS 4333 (Part 1)
v)	Damaged Kernels, percent by mass, <i>Max</i>	5.0	8.0	IS 4333 (Part 1)
vi)	Kernels with pin point, percent by mass, <i>Max</i>	4.0	4.0	IS 4333 (Part 1)
vii)	Immature Kernels, percent by mass, <i>Max</i>	0.5	0.5	IS 4333 (Part 1)
viii)	Chalky Kernels, percent by mass, <i>Max</i>	5.0	0.1	IS 4333 (Part 1)
ix)	Uric acid, mg/kg, <i>Max</i>	100	100	IS 4333 (Part 5)
x)	Aflatoxin B ₁ , µg/kg, <i>Max</i>	10	10	IS 16287

NOTE — In foreign matter, the impurities of animal origin shall not be more than 0.10 percent by mass.

Example 2:

- 1) The processed cereal-based complementary food shall be processed, packed, stored, and distributed under strict hygienic conditions as prescribed in IS 2491.
- 2) Unless specified otherwise, pure chemicals and distilled water (see IS 1070) shall be employed in tests.

6.10.2 Requirements may be obligatory, optional or recommendatory and informative, according to their operative character. The sequence of their appearance in a standard and their grouping shall be decided according to individual requirements.

- a) *Obligatory clauses* — Clauses dealing with requirements conformity to which is obligatory. Such clauses may be general or specific in character.
- b) *General requirement clauses* — Clauses dealing with common requirement applicable to the subject-matter of the standard as a whole.

Example:

Enameled cast iron railway type water closets shall conform to the requirements of IS 772: 1973.

- c) *Specific requirement clauses* — Clauses dealing with requirements covering a particular attribute of the material or requirement for a particular purpose.

Examples:

- 1) The total loss on ignition shall be not more than 4 percent.
- 2) Phosphor bronze wire, when used in the manufacture of springs, shall have the following composition:

<i>Sl. No.</i>	<i>Composition</i>	<i>Percent</i>
(1)	(2)	(3)

i)	Tin	3.0 to 4.5
ii)	Phosphorus	0.02 to 0.40
iii)	Lead	0.02 Max
iv)	Total impurities including lead	0.2, Max
v)	Copper	Remainder

- d) *Optional* or recommendatory clauses — Clauses dealing with requirements of non-obligatory or recommendatory character, conformity to which is left to the contracting parties. These clauses may also be general or specific in character.

Examples:

- 1) If desired by the purchaser, an eyehook for the handling of the column during transport and erection may be provided in the column at 100 mm below ground level on the face of the column so as to utilize the maximum flexural strength of the section during handling.
- 2) After selection and prior to fabrication/erection, all structural timbers should be stored so as to prevent decay and renewed development of defects. A recommended practice for storing timber is given in Annex A.

Subject to prior agreement, the supplier shall furnish such of the following additional information as may be required by the purchaser:

- i) Relative density,
 - ii) Bulk density, and
 - iii) Moisture content
- e) *Informative clauses* — Clauses dealing with matter which is neither obligatory nor optional in character, but which is likely to be helpful in selecting material or otherwise likely to enhance the usefulness of the standard. If not included elsewhere, such information may be given in the form of informative clauses or as notes to the relevant clauses of the standard. Informative clauses may also be either general or specific.

Example:

A typical composition of the material of the wire is given at 6.10.2.

6.10.3 Reference to IS 2 shall be given under the references clause, where calculations are involved or observed value requires rounding off for final reporting.

The following formal clause shall be given as applicable:

- a) Title of the clause – “Reporting of final value/results”
- b) Content of the clause are as following:
 - 1) For Standards on Products, services and codes of practice-

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2. The number of significant

places retained in the rounded off value should be the same as that of the specified value in this standard.

2) For Standards on Method of Test-

In reporting the result of a test or analysis made in accordance with this standard, is to be rounded off, it shall be done in accordance with IS 2.

6.11 Sampling

Product specification should include sampling clause to give general guidance in deciding the criteria for acceptance of lot based on the sampling inspection.

Sampling clauses should clearly describe:

- a) Definition of a lot;
- b) Method of selection of samples from the lot;
- c) Sampling instruments required for drawing the sample;
- d) any material, if required, for packing and transportation of sample;
- e) Number of samples to be tested for various requirements of the specification; and
- f) *Criterion for acceptance* — acceptance number for each requirement for deciding the conformity of the lot as a whole to the requirements of the specification.

NOTES

1. For sampling reference may also be given to IS 2500 (Part 1). In such cases, inspection level and AQL for various characteristics should also be given. For random selection of samples from the lot, reference may be given to IS 4905.
2. In certain situations, there may be a separate Indian Standard on sampling for example. Methods of sampling for alcoholic drinks (*first revision*) IS 3753 : 1984. In such situations, for sampling, reference to specific Indian Standard should only be given.

6.12 Test Methods

Test methods shall include the following, as applicable:

- a) Significant/scientific or working principle;
- b) Terminology;
- c) Preparation of sample/specimen;
- d) Atmospheric conditions, like temperature and relative humidity;
- e) Testing equipment/apparatus with accuracy and metrological traceability;
- f) Materials and reagents;
- g) Test procedure including conditioning, if any required;
- h) Evaluation of results, with examples, where necessary;
- j) Form of reporting of results with measurement uncertainty, including methods of presentation of data in the form of graphs, diagrams, etc.; and
- k) Repeatability, reproducibility and uncertainty of test method, where possible.

6.12.1 Test methods may be part of product specifications or independent standards. Where they are a part of product specification, it may be included in body of the standard, if brief; otherwise they may be given as annexes in the order of their reference in the standard.

6.13 Marking

6.13.1 Product standards shall contain marking clauses indicating basic requirements about the identity of products, source of manufacture, etc. and any other requirement specific to the products, including statutory and regulatory requirements.

6.13.2 Product standards shall contain Bureau of Indian Standards certification marking clause as given below:

- a) *Title of the clause — Bureau of Indian Standards certification marking*
- b) Content of the clause —

“The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.”

6.14 Packing and Packaging

Where applicable, product specifications shall contain a clause giving details of packing and/or packaging.

NOTE — The sequence of clauses of marking, and packing and packaging in a product specification is interchangeable depending on the situation. If necessary, these clauses may also be combined.

6.15 Notes

In the text of Indian Standards, notes should be limited to those essential to the immediate understanding of the text. They should be brief and placed adjacent to the text to which they refer or, if this is not possible, closely associated by reference. Notes should not be used in the text to state the requirements of a standard.

The character style of “NOTE” should be capital letter and font size should be two size smaller than main text and should be numbered, if more than one.

In case of a single note the matter shall be separated from the word ‘NOTE ’ by ‘—’. When more notes appear under the same clause, subclause, table or figure, they shall be placed under the title ‘NOTES’ and numbered in Hindu Arabic.

6.16 Tables

Tables shall be used wherever tabular presentation is required. It would eliminate repetition or show a relationship more clearly. All tables shall have grid lines with column number and serial number as per Table 2.

Every table shall be referred to in the text of the standard, in numerical sequence, with appropriate wording to establish relevance and status. The character style of table shall have initial letter in capital only when referring to designated table in a document. If the table is continued on the next page, the heading shall be repeated once on that page also.

NOTES

1. For simple tables, three horizontal lines should be used as per the template attached at Annex 6 SOP.
2. For complex tables, all borders may be retained as per the template attached at Annex 7 SOP.

6.16.1 *Title for Table*

6.16.1.1 Title in title case and in bold shall be placed at the top of all formal tables which shall be numbered in Hindu-Arabic numerals in one consecutive series in a given standard, including tables in annexes. Grouping of tables as Table 1A, Table 1B, etc., should be avoided unless they are very closely related and their combination into a single table becomes inconvenient.

6.16.1.2 The word 'Clauses/Clause/and' shall be written in italics while digits shall be written in non-italics.

Example:

Table 3 Dimensions and Tolerances

(Clauses 4.5, 5.2 and fig. 1)

6.16.2 *Column*

6.16.2.1 If required column numbers may be given in Hindu-Arabic numerals in parenthesis below the column heading.

6.16.2.2 If the values in a column are associated with a unit of measurement, the appropriate unit symbol should be placed immediately above the column values.

6.16.2.3 'col' shall be written to refer column number in text instead of word 'column'.

6.16.3 *Footnotes*

Where it is necessary to use footnotes in formal tables, they shall be in smaller type placed immediately below the bottom line and shall be indented. To indicate references to footnotes, superior Hindu-Arabic numerals shall be used.

6.16.4 *Position in Text*

In the standards, each formal table shall, as a general rule, be placed near to the first reference, without breaking into the middle of a paragraph. Necessity of turning a page to refer to a table should be avoided. However, tables requiring frequent references independent of the text may be given at the end of the standard.

6.16.5 *Use of 'Nil' and 'Dash'*

In no case shall an entry in any row or column in a table be left blank.

When, specifying requirements in a table, situations may arise, as in the case of composition of material(s), where the absence of a particular ingredient may have to be stated as obligatory requirement. Such requirements shall be specified by using the word 'Nil' against the relevant entry.

Further, there may be cases where more than one grade of material(s) is covered in a standard and the requirements are tabulated under each grade. Where a requirement so tabulated does not apply to some grades, a dash (—) and not 'Nil' shall be used to indicate that the requirement does not apply to the relevant grade(s).

6.16.6 *Breaking' of Tables*

'Breaking' of a table, namely, carrying it over from one page to another should be avoided as far as possible. When, however, there is no option but to carry a table from one page to the next, the frame shall be left open at the bottom (that is, lower horizontal line shall be omitted). On the pages after the first, the number of table shall be repeated, followed by the words given below:

- '*continued*' on subsequent pages
- '*concluded*' on the final page.

If table is concluded on second page only the word '(concluded)' shall appear; the word '(continued)' shall not be used.

The column heading shall be repeated on pages after the first.

Example:

Table 3 Reference Values for Impact Sound

(Clause 2.2)

Frequency Hz	Reference Value dB

Table 3 *(continued)*

Frequency Hz	Reference Value dB

Table 3 *(Concluded)*

Frequency Hz	Reference Value dB

6.17 Illustrations

6.17.1 *General*

Diagrams, maps, graphs, photographs and drawings shall be used wherever it is possible to illustrate an idea more clearly, concisely and accurately. Illustrations can also serve to replace extensive textual matter and clarify in more detail the requirements specified in the text. The illustrations may themselves include requirements.

Where practicable, illustrations also serve to illustrate provisions in the text by providing typical examples. In such cases they should not restrict the options available for fulfilling the requirements of the standard, or conversely, override them.

6.17.2 In preparing illustrations, recommendations contained in relevant Indian Standards on drawing practices shall be followed.

For maps of India or any part of the country meant for inclusion in Publications of Bureau of Indian Standards, prior approval of the Director, Survey of India, Dehradun shall be obtained.

6.17.3 *Preparation of illustrations*

The following instructions shall be followed in preparing illustrations for line and halftone figures to be printed:

- a) Lettering — The lettering in the original copy of an illustration shall be large enough to be legible when its size is appropriately reduced for reproduction.

6.17.4 In the preparation of illustrations, while deciding the size of the illustration, thickness of lines and the lettering, the reduction of the drawing shall be kept in mind. As far as possible, the size, thickness of lines and the lettering should be uniform in one publication and not vary in color.

6.18 Annexes

6.18.1 Annexes provide additional information to the main body of standard in cases where:

- a) information or table is very long and including it in the main body of the standard would distract the user; and/or
- b) to set apart special types of information or particular application of the standard (For example list of reference standards, method of test, conversion factors or tables, charts, sampling plan, committee composition etc.).

6.18.2 Annexes can be normative or informative.

Example:

- 1) When tested in accordance with Annex A, the density of the material shall be neither greater than 1.05 nor less than 0.97 at $27 \pm 1^\circ\text{C}$ — Normative.
- 2) The typical materials used in the manufacture of the components are given in Annex B — Informative.

A recommended sampling plan for oil pressure stoves is given in Annex C — Informative.

6.18.3 Each Annex shall have a heading comprising the word “Annex” and shall be sequentially numbered using alphabets in sequential order. Annex heading shall be followed by indication normative or informative underneath along with referencing clause number. Followed by the title of Annex in title case and bold. Annex may be subdivided into clause, sub-clause, table, figure and mathematical formula and shall be numbered preceded by letter designated by Annex followed by dash (-) and Hindu-Arabic number. Each Annex shall be explicitly refer to within

the text. Annexes should be arranged in the sequence of reference in the standard, unless grouping by subject matter is more appropriate.

Example:

Annex A
(*Clause 6.18*)

6.18.4 *Committee Composition*

6.18.4.1 *General Rules*

- a) The word ‘Chairperson’ shall be used instead of ‘Chairman’.
- b) Recommended Salutations ‘Shri, Shrimati and Kumari ’ are to be used instead of ‘Mr., Mrs. and Miss’.

NOTE — Any other titles of professions like Doctor, Professor ,Defense or Military shall also be given as per their writing styles.

- c) ‘.’ shall not be added after any abbreviated word in ‘Organization’ column.
- d) Name of Organization shall be mentioned without name of state in ‘Organization’ column.
- e) Designation shall not be mentioned in ‘Representative(s)’ column when the name has been mentioned.
- f) ‘Representative’ to be written instead of ‘Nomination Awaited’ in ‘Representative(s)’ column.
- g) Postal address of members ‘In Personal Capacity’ shall be mentioned without name of state.
- h) Abbreviation of Technical Departments shall not be used.

Example:

- 1) Civil Engineering
- 2) Food and Agriculture
- 3) Textiles

6.18.4.2 The composition of sectional committee, sub-committee and panel responsible for preparation of a standard shall be given as last Annex. The composition for this purpose shall be taken as on the date of finalization of the standard.

6.18.4.3 The composition shall be given in table format. The left-hand column should give the name of the organization in alphabetical order and right-hand column the name of their representatives both in title case except for in panel/working groups.

6.18.4.4 *Composition shall be arranged in the following order:*

- a) Sectional Committee

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- 1) Chairperson
 - 2) Members
 - 3) *Ex-officio* member
 - 4) *Member-Secretary*
- b) Subcommittee
- 1) Convener
 - 2) Members — arranged as in the case of sectional committee, name(s) of *ex-officio* member(s), however, not appearing.
- c) Panel
- 1) Convener
 - 2) Members — left-hand column should give the name of the expert and right-hand column the name of their organisation both in title case.

NOTE — Generally, there shall be only one alternate to the principal member. However, in case of certain organizations like Defence, Associations, etc, where more than one alternate may be named to attend meetings in different zones, their names may be indicated in the composition in alphabetical order of their names.

6.18.4.5 *Member in personal capacity* — In case of a member appointed in his personal capacity, the words 'In personal Capacity' followed by his postal address shall be given in the left-hand column. Postal address of members in personal capacity shall be written in italics and name of state shall not be mentioned. The list of members in personal capacity shall appear at the end after other members, in alphabetical order of their names. Alphabets 'P' and 'C' shall be written in upper case for 'In Personal Capacity'.

6.18.4.6 *Ex-officio member* — The name of the Departmental Head with his/ her designation and representing Director General, BIS (Ex-officio Member) shall appear as the last entry in the list of sectional committee members in the right-hand column against Directorate General, Bureau of Indian Standards, New Delhi.

6.18.4.7 *Member-Secretary* — The name and designation of the member-secretary shall appear together at one place after the list of all sectional committee members under the 'Member Secretary' and designation in parentheses, centered on the width of the page. If the Departmental Head is the member-secretary, his/her name along with designation shall appear in addition of the word 'Member Secretary' in italics and in parentheses.

6.18.4.8 If the member secretary of panel or sub committee is not same as the member secretary for that sectional committee, their details shall be included suitably. Same format shall be followed as in 6.18.4.7.

6.19 Index

A subject index wherever considered necessary for inclusion in the standard, shall be prepared in accordance with IS 1275.

7 SPECIFIC ASPECTS OF DRAFTING

7.1 Units of Measurement

The International System of Units (SI) and the other units that are recognized Internationally for use with SI, in accordance with IS 10005 shall be the standard units of measurements.

When a recognized unit outside SI is used, its relationship with the SI unit should be explained on its first occurrence in parenthesis.

Example:

If bar is used for pressure, the relation, 1 bar = 10^5 Pa should be given.

7.2 Letter Symbols for Quantities and Units

Signs and symbols should be used as a matter of convenience in standards. Signs and symbols for quantities and units shall comply with IS 1890 (Part 0) to (Part 13). Whenever required, their meanings may be explained by association with definitions in a separate clause, in a diagram, or in an annex or by association with the terms they represent when they first appear in the text.

7.3 Reference to Indian Standards

7.3.1 In the body of the text of standard, there shall be no reference to publications other than Indian Standards. Reference to publications other than those of Bureau of Indian Standard shall be avoided by reproducing the relevant texts from those publications and with prior permission of the authorities concerned, where necessary. Assistance so drawn may be acknowledged in the foreword to Indian Standards.

NOTE - Referencing of other standards in special situations, where it is not possible to avoid the reference by developing an Indian methodology/requirement, can be included with adequate justification / situational description in foreword.

Example:

Not recommended — Thermometers conforming to the Institute of Petroleum Designation IP 24C shall be used.

Recommended — Thermometers conforming to the following requirements shall be used:

Range	95 °C to 103 °C
Graduation	0.1 °C
Immersion	Total

7.3.2 In the text of a standard, reference to other Indian Standards shall be made, wherever required by quoting their designations (without title and year of publication). In case conformity to a specific part or aspect of other Indian Standards is required, reference to that part/aspect shall be specifically included.

7.3.2.1 The designation and title of referred standards shall be listed in clause 2. The designation of the referred standard shall be preceded by the words 'conforming to/in accordance with/as prescribed in/as given in etc.....' in the reference in the text.

NOTES

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1. Whenever cross reference to a clause/table/figure/annex, etc.... of other standard is placed within parenthesis, and if the reference is of obligatory character, it shall be done without the use of any directing word, such as 'see' before it. But if the reference is only for information, the word 'see' or 'see also' shall be used before it.
2. Indiscriminate use of reference to other Indian Standards should be avoided so as not to, put impediments in their implementation. In case reference is to a small portion of a standard the possibility of reproducing the referred part may be considered.

7.4 Cross References Within a Standard

Whenever cross reference to a clause/table/figure/annex, etc.... of the standard is placed within parenthesis, and if the reference is of obligatory character, it shall be done without the use of any directing words, such as 'see' before it. But if the reference is only for information, the word 'see' or 'see also' shall be used before it.

7.5 Bibliographical References to Other Publications

7.5.1 Bibliographical references shall be made in accordance with IS 2381. The examples given in 7.5.2 to 7.5.5 illustrate the application of IS 2381 in the case of standards and draft standards, published articles, books, government publications and reference books. In the list of bibliographical references following sequence shall be followed for various publications:

- a) Standards and publications issued by the International Organization for Standardization;
- b) Standards and publications issued by the International Electro technical Commission;
- c) Standards and publications issued by other International standardizing bodies listed in alphabetical order of their names;
- d) Standards and publications issued by regional standardizing bodies listed in alphabetical order of their names;
- e) Standards and publications issued by National Standards bodies, arranged in alphabetical order of the names of countries from which they originate;
- f) Standards and publications issued by agencies other than the National Standards bodies, arranged in alphabetical order of the names of countries of origin;
- g) Government publications, other than standards, in alphabetical order of the names of countries of origin; and
- h) All other publications (including books and published articles) arranged in alphabetical order of the names of authors, or in their absence, of the editors, compilers, publishers or titles.

7.5.2 Standards and Draft Standards

Bibliographical reference to a standard or draft standard shall consist of at least the following items of information:

- a) Designation as adopted by the issuing authority:

Examples:

ISO 17933 : 2000

BS 3843 (Part 3) : 1992

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- b) Title of the standard (the title shall be separated from the designation by a space and without any punctuation mark. Only the initial letter of the first word of the title shall be given in capitals). In the case of standards in foreign languages, or in scripts other than Roman, translated titles in English shall be given;
- c) Year of publication of the standard if not already present in the designation of the standard;
- d) Name of issuing authority in Roman script;
- e) If there is more than one standard or draft standard pertaining to one particular country, they shall be arranged in ascending numerical order; and
- f) Where the standards pertaining to any one country do not bear designation numbers, they shall be arranged in the alphabetical order of the title of the standards.

Examples:

- ISO 7398 : 1982 Building construction — Jointing products — Determination of elastic recovery. International Organization for Standardization.
- IEC 752 : 1982 Audio-frequency calibration tape for transverse track recorders. International Electrotechnical Commission.
- NFS 81-525 : 1974 Shock resistant wrist watches. Association Française de Normalisation.
- DIN 71412 : 1977 Grease nipples with conical head. Deutsches Institute für Normung.
- BS 5783 : 1979 Code of practice for handling of electrostatic sensitive devices, British Standards Institution.
- ASTM Designation: E131-83 Standard definition of terms and symbols relating to molecular spectroscopy. American Society for Testing and Materials.
- IND/TC/1618: 1962 Socks, wool, Ministry of Defence, Government of India.

7.5.3 Published Articles

Bibliographical reference to published articles shall be given in the alphabetical order of the names of authors and in the manner illustrated by the following examples:

Bajaj (P). Standardization in Tea Industry. Standards India Vol 15, No. 4, 12/12 July 2001

Pant (Sanjay). Revision of National Building Code of India: New Directions for Revision. Standards India Vol 16, No. 6, 12/12 September 2002, 4-17'.

7.5.4 Books

Bibliographical reference to books shall be given in the alphabetical order of the names of author(s)/editor(s). In case of editor(s), the abbreviation, (Ed) shall be indicated against the name(s). In case names of authors or editors are not given, the entries of publications shall be arranged in alphabetical order of their titles.

- a) STAMATIS (DH) – Six sigma and Beyond VVI. Designing for six sigma 2001 CRC Press LIC; Florida,
- b) JOHN (E. BAUER), GRACE (L) and RUSSEL (T. WESCOTT), ED. The quality Improvement Handbook. 2002. ASQ Quality Prss, MALWAUKEC, WI. p 57-84.

- c) BRANDES (ERIC A), Ed. Smithells metals reference book. 1993, Butterworth & Co (Publishers) Ltd, London.

7.5.5 *Government Publications*

Bibliographical references to government publications shall be given in the alphabetical order of the names of countries and in the manner illustrated by the following examples:

INDIA. MINISTRY OF FOOD AND AGRICULTURE. Myrobalan grading and marking rules 1982. Manager of Publications, Delhi.

UNITED KINGDOM. MINISTRY OF HOUSING AND LOCAL GOVERNMENT. Control of radioactive wastes. 1962. H M Stationery Office, London.

8 DETAILED CONVENTIONS

8.1 General Layout

The text of an Indian Standard shall be set on A4 size paper in double column of font size 10. However, if the tables and the figures so require, printing may be done in single column.

8.2 Cover Pages

The style to be followed for the layout of the cover pages shall be as follows:

8.2.1 The first cover page shall give the designation, title, International Classification System (ICS) No., copyright, price group No., month and year of publication, name and address of the issuing authority, that is BIS as follows:

- a) *Date of publication* — The month and year of publication of a standard shall appear in the bottom left-hand corner on the cover;
- b) *ICS number* — Each Indian Standard shall bear a number according to the International Classification System (ICS) on the first cover page;
- c) *Price group number* — Each Indian Standard shall bear a price group number which is linked with price of publication. The group number shall appear on the bottom right-hand corner on the first cover page; and
- d) *Status of printing* — Each Indian Standard shall also give the information given below as appropriate:
 - 1) When a standard is superseded by a new standard carrying a different number the words 'Superseding IS.....', in parentheses, shall be written just below the designation of the superseding standard on the first cover page;
 - 2) When a standard is reprinted, the words 'First Reprint', followed by the month and year in which the standard is reprinted, all in parentheses, shall appear below the title on the cover page. There shall be no change in the designation (number and year) or in the date of publication of the standard. In case of subsequent reprints the respective reprint number should be given;

Example:

- a) (First Reprint AUGUST 1984)

b) (Seventh Reprint OCTOBER 2000)

- 3) When standard is reprinted incorporating amendments issued thereto, this shall be suitably stated on the first cover page.

Example:

IS.....:1999
(Incorporating Amendments No. 1 and 2)

- 4) When a standard has subsequently been reviewed and reaffirmed and in case of a subsequent, reprint, the word 'Reaffirmed' followed by the year in which the standard is reviewed and reaffirmed, all in parentheses, shall appear below the designation:

Example:

IS 13550 (Part 5) : 1994
(Reaffirmed 1999)

- 5) When a standard is revised, the revised version shall carry, in italics and in parentheses, the words 'First Revision', 'Second Revision', 'Third Revision', etc, as the case may be, under the title on the first cover page and the page on which the text begins. The year in the designation of each revision shall be the year of that revision and not that of the original publication or of an earlier revision. Similarly, the date of publication shall be the date of publication of that revision.
- 6) When the draft revision of a standard is issued in circulation for comments, the fact that it is a draft revision shall be indicated below the title as illustrated by the following example:

Example:

Draft Indian Standard

GUIDE FOR DRAFTING AND PRESENTATION OF INDIAN STANDARDS

(Fifth Revision of IS 12)

8.2.1.1 The title of the standard in Hindi shall appear above the English title.

8.2.1.2 A typical example of a first cover page shall be same as for this standard, for showing the exact positions of various items to be given on the first cover page.

8.2.2 *Second Cover Page*

The second cover page of the standard shall give the Foreword. If the Foreword is long and is not accommodated on the second cover page it may be carried over to the third cover page.

The name of the sectional committee along with its designation shall be given at the top of the second cover page.

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In some standards where table of contents is considered important may be printed before the foreword.

8.2.3 *Third Cover Page*

Residual part of the foreword if any shall be continued on third cover page.

8.2.4 *Fourth Cover Page*

A short note about Bureau of Indian Standards, information on copyright, invitation for comments on the Indian Standard shall be given on the fourth cover page of the standard. Space for a table to record the particulars of amendments which may be issued subsequently shall also be provided. At the bottom of this page, address of Bureau of Indian Standards Headquarters and its other offices shall be given. A typical example of fourth cover page shall be the same as for this standard.

8.3 **Use of Capitals**

8.3.1 *Indian Standard(s)*

In the term 'Indian Standard(s)' the first letter of each word shall be in capitals. But when referring to standards in general, the word 'standard' shall be in lower case.

8.3.2 *Proper Nouns*

In general, proper nouns and proper adjectival nouns shall have the initial letters in capitals. In some cases, however, words originating from proper nouns have developed specialized technical meanings and have become so generally accepted that they need not be in capital.

Examples:

ampere, black-japan, china-clay, coulomb, diesel, henry, joule, macadam, newton, ohm.

8.3.3 *Names of Organizations*

8.3.3.1 *Complete names*

The initial letters of principal words of legislative, judicial and administrative bodies, ministries, departments, bureaus, offices, organizations, etc, shall be in capitals.

8.3.3.2 *Incomplete names*

The initial letters of the words, such as 'committees', 'departments', etc., shall be in capitals when they are used in the names of an organization or pertain to a particular organization mentioned earlier in text, but not so when used in general designation.

Examples:

- Incorrect—*
- a) Sustainable Finance sectional committee, MSD 18
 - b) The subcommittee working under the authority of FAD 23.

- c) Ship Building sectional committee, TED 17
- d) The department of Electronics.

- Correct—*
- a) Sustainable Finance Sectional Committee, MSD 18
 - b) The Subcommittee working under the authority of FAD 23.
 - c) Ship Building Sectional Committee, TED 17
 - d) Department of Electronics.

8.3.4 Enumeration Following a Colon

The first letter of the first word of each item listed shall be in capitals in enumerations that are formally indented after a colon, but not when items run along in a sentence (*see* also **8.6.5.3**).

Example:

The following damages may be observed during the performance test:

- 1) Loosening of joints, and
- 2) Occurrence of cracks or splits on the various wooden parts.

NOTE — Example under **8.6.5.3** illustrate cases in which the first letter of first word of each item listed should not be in capitals

8.3.5 Titles and Captions

In a title or caption, in typescript, initial letters of principal words shall be in capitals including verbs, such as 'Is', 'Are', 'Shall Be', etc. In case of prepositions, their initial letters should not ordinarily be in capitals, unless emphasis is demanded (*see* also **8.12.1** and **8.13.1**).

Examples:

- 1) When process is under control;
- 2) Compressive strength of concrete; and
- 3) Temperature in and around Window Frames.

8.3.5.1 Hyphenated Words

Both parts of a hyphenated word shall have initial letters in capitals in a title or caption when both parts are complete words in themselves; but when the first part of a hyphenated word is a prefix, the initial letter of the second part shall not be in capital.

Example:

- 1) Master-Builder
- 2) Sub-subclasses

8.3.6 Figures and Tables

The word 'figure' (abbreviated as Fig.) and 'table' shall have initial letters in capitals only when referring to a designated figure or table in a document.

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Examples:

- 1) The dimensions of spades shall be as given in Table 2 read with Fig. 1.
- 2) The table and figure on page 12 specify all characteristics of the material.

8.3.7 Use of capitals in titles of items, clauses, subclauses and sub-subclauses shall be in accordance with **8.13**.

8.4 Use of Hyphens

8.4.1 There are few universally accepted rules for hyphenation in English language. Use of a hyphen depends on a combination of a common sense, convention and freedom from ambiguity. In Indian Standards, a hyphen shall only be used where failure to do so would cause ambiguity or where hyphenation is firmly established by convention.

8.4.2 Breaking words by hyphenation at one end of a line, a column or a page shall be avoided.

8.5 Use of Italics

Italics shall be used sparingly, and only when deemed necessary to emphasize or differentiate sharply certain words or phrases from the rest of the text. Official acts, Rules and Regulations of the government shall be in italics.

8.5.1 Words in language other than the language of the standard shall be written in italics.

8.5.2 Letter Symbols for Quantities

Italics shall be used for symbols for physical quantities. In cases where a subscript letter forms a part of letter symbol for quantity, the subscript shall also be italicized if it represents a quantity, otherwise not.

Examples:

V_t = volume V at temperature t

V_t = volume V of test piece t

8.5.3 Drawing Symbols

When letter symbols appearing in a figure are referred in the text, they shall be italicized even when they have not been italicized on the drawing. However, the designation of lines or points shall be referred to in the text as they appear on the drawing and shall not be in italic.

8.5.4 Symbols for unit mathematical operations and chemical elements shall not be italicized, even if they form a part of a heading which is otherwise in italics.

8.5.5 Italicization in titles, headings, etc, shall be done as given in **8.13**.

8.6 Punctuation

8.6.1 General

Punctuation should be used sparingly but consistently and always in accordance with generally accepted grammatical principles with the sole aim of achieving clarity of expression.

8.6.2 *Full Point*

A full point represents the greatest pause and separation. It is used to mark the end of a declarative or an imperative sentence. It is also used in abbreviations, for example, Fig. for figure. From general usage full points are mostly omitted between capital letters in abbreviation of the names of organizations, for example, 'ISO', 'FAO', unless the organization has established its own convention which employs full points. Similarly, full points are not used in acronyms. These retain full capital letters if they represent organizations like 'ISO', 'STC', but are otherwise shown as common words (which may have become such as 'laser' and 'radar').

8.6.3 *Comma*

8.6.3.1 *General principle*

A comma is used as a mark of separation to make clear the grouping of words, phrases and clauses with respect to grammatical structures of the sentence. However, too frequent use of commas can hinder the flow of text and should be guarded against.

8.6.3.2 *Clause or phrase within a sentence*

If a clause or phrase within a sentence is to be set apart from the rest of the sentence, one comma before the clause or phrase and one after it shall be used.

Example:

Incorrect — The rule as has been stated separately is tentative.

Correct — The rule, as has been stated separately, is tentative

8.6.3.3 *Commas* shall be used to separate items enumerated in a list form after a colon, unless any of the items contains commas already, in which case semicolons shall be used to separate the items (*see* examples under **8.6.5.3**).

8.6.3.4 *When* a qualifying term specifying a grade or any other characteristic of a material is used after the name of the material, it shall be separated by a comma and not a dash.

Examples:

- 1) Bleaching powder, stable;
- 2) Punches, round;
- 3) Cables, high tension; and
- 4) Steel, mild.

8.6.4 *Semicolon*

8.6.4.1 *Complicated phrases or clauses*

Semicolons are used where an idea is complete but is connected to a similar complete idea; or to separate complicated phrases or clauses.

Example:

The Table, including the latest additions; the text, including the chapters on trade practice; and the bibliography were carefully studied.

8.6.4.2 *Important breaks in a sentence*

A semicolon is used to make a more important break in the flow of a sentence than that marked by a comma, or to separate complete statements whose force is dependent upon their remaining in the same sentence.

Example:

This is as important in theory as it is in practice; indeed, it may be said to be only consideration.

8.6.5 *Colon*

8.6.5.1 *Between the IS designation number and the year*

A colon shall be used to separate IS designation number and its year of publication.

Example:

IS 12040 : 2001

8.6.5.2 *End of a page or column*

A colon shall never be at the end of a page or a column. The last line or two shall be carried over so that the colon immediately precedes the material, which it introduces.

8.6.5.3 *Enumerations*

It is preferable to enumerate items in a list form and not to run them along in a sequence. A colon shall precede such enumerations, following immediately after such introductory phrases as 'as follows', 'consisting of', 'conditions are', etc. All enumerations should be punctuated as if they were in sequence in paragraph form (*see 8.3.4*).

Examples:

- a) The material recommended consists of:
 - 1) poles or uprights;
 - 2) ledges; and
 - 3) braces.
- b) Among such usual conditions are:
 - 1) exposure to damaging fumes or vapours, excessive abrasive dust or gases, steam, salt spray, excessive moisture, dripping water, etc;
 - 2) exposure to abnormal vibration, shocks; or tilting; and

3) exposure to unusual transportation or storage.

8.6.6 *Dash*

8.6.6.1 *In a sentence*

Since technical documents seldom use language in which there are sudden breaks in thought, or clauses not logically part of a sentence, it is recommended that the use of dash be avoided in the text of a standard.

8.6.6.2 *Between IS designation and title*

A dash shall not be used to separate the title of a standard from the IS designation.

Example:

Incorrect — IS 14729 : 1999 — Code for the measurement and reporting of local vibration data of ship structures and equipment

Correct — IS 14729 : 1999 Code for the measurement and reporting of local vibration data of ship structures and equipment

8.6.6.3 *In a Table*

The use of dashes in table shall be given in **6.16.5**.

8.6.7 *Quotation Marks*

8.6.7.1 *General principle*

If the punctuation mark belongs to the part of the matter quoted, it shall be placed inside the quotation marks; otherwise it shall be placed outside.

Single quotations shall be used in standards. Where two matters have been quoted, one within the other, the inner quotations shall be single and the outer double.

8.6.7.2 *Titles of articles and publications*

Titles of books, articles, or chapters (parts of a complete publication) shall be placed in single quotation marks except when listed in a bibliography, where no quotation marks are needed (*see 7.5*).

Example:

The chapter 'Method of Testing' from the booklet.....

8.6.8 *Parentheses*

Punctuation associated with parentheses should accord with the nature of the text enclosed; a full sentence within the parentheses should include the full point before the closing bracket. When a substantial quantity of text is to be given in parentheses, consideration should be given instead to presenting it in the form of a note.

8.7 Use of Words

8.7.1 *Indian Standard*

The expression 'Indian Standard' in the titles of Indian Standards qualifies 'specification', 'code of practice', 'requirement', 'methods of test', 'guide', 'definition', etc. Its use as a noun in the title of a standard is not permissible.

Example:

Incorrect — Indian Standard for wooden folding chairs.

Correct — Indian Standard specification for wooden folding chairs

8.7.1.1 *Standardize*

The verb 'Standardize' should be carefully used. To say that 'Bureau of Indian Standards Standardizes a material' is not appropriate. Standardizing a material correctly means the physical act of standardizing it. It will be correct to state that Bureau of Indian Standards formulates, prepares, prescribes, lays down, evolves, or develops standards for materials, processes, tests, etc.

8.7.2 *Articles*

8.7.2.1 *Use of 'The'*

The article 'the' is applied to an individual object or to objects mentioned earlier in the text or already known, or contextually particularized. When in doubt, the answer to 'what' or 'which' generally clarifies whether 'the' is required or not.

Examples:

The cotton grown in India is of the short staple variety.

Which cotton?

The cotton grown in India.

The definite article should not be used when objects are referred to in general or in an undefined sense.

Examples:

1) India, in comparison with other countries or the world, ought to have more than 20 million cars.

Which countries?

Other countries in general.

2) Cotton is grown in India.

Which cotton?

Cotton in general.

8.7.2.2 *Use of 'A/An'*

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The rule governing the use of 'an' is phonetic and not orthographical. 'An' is used before a vowel and a silent 'h'.

Examples:

An eyelet, an heirloom, an 18th century practice.

The article 'a' is, however, used before vowels preceded, in fact though not in appearance, by the sound 'y' or 'w'.

Examples:

A unit, a one-room house, a eulogy.

8.7.3 *Use of 'And/Or'*

The expression 'and/or' in the text of a standard should be used with care to avoid ambiguity.

8.7.4 *Use of 'Percent', 'Subcommittee'*

Words like percent, subcommittee, subclause, cooperation, cooption, etc, are used as single words.

8.7.5 *Use of 'Etc'*

The word 'etc' (etcetera) should be used only after two or more nouns without the conjunction 'and'.

Example:

Incorrect — Bolts, nuts and washers, etc, are required in large numbers

Correct — Bolts, nuts, washers, etc, are required in large numbers.

8.7.5.1 In particular, 'etc' should not be used after a sequence introduced by expressions like 'for example' and 'such as'.

8.7.6 *Dates*

In the text, dates shall be given in the order:

day, month, year. Commas, 'st', 'nd', 'rd', or 'th' shall not be used.

The month shall not be indicated by numerals, but shall be spelt in full.

Examples:

Not recommended— a) 2nd Sept., 1986
b) Jan 4, 1968
c) 17th Aug. 1957

Recommended — a) 2 September 1986
b) 4 January 1968
c) 17 August 1957

8.7.6.1 If the dates are required to be given in all-numeric form, it shall be done in accordance with IS 7900.

Example:

21 September 2001 shall be written as 2001 09 21

8.7.7 *Chemical Formulae*

In the text, names of chemicals should be expressed, as far as practicable, in words, formula being given in parentheses wherever necessary. Formulae may be used in tables or equations

Example:

Incorrect — Add 10 ml of H₂SO₄

Correct — Add 10 ml of Sulphuric acid

8.7.8 *'Shall', 'Should' and 'Must'*

8.7.8.1 *'Shall'*

The word 'shall' shall be used to indicate the obligatory character of a requirement.

8.7.8.2 *Should*

The word 'should' shall be used to indicate that the requirement is recommendatory and not obligatory.

8.7.8.3 *Must*

The word 'must' shall not be used to express obligatory character.

8.7.9 *May and Can*

8.7.9.1 *May*

In specification clauses, the word 'may' shall be used when permissible character is implied.

8.7.9.2 *Can*

In specification clauses, the word 'can' shall be used to express capability whether material, physical and casual.

8.7.9.3 *By*

The word 'by' shall not be used to denote the dimensional designations, in place of the multiplication sign (x).

Example:

Incorrect — 20 by 10 by 10 cm bricks

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Correct — 20 cm x 10 cm x 100 mm bricks

8.7.10 *'Amendment'*

The word 'amendment' when used in connection with a standard shall indicate modifications (alterations, additions or deletions) in the contents of the standard, including corrections of errors (*see 10*).

8.7.11 *Spelling*

The Oxford English Dictionary shall serve as the authority for spelling.

8.7.12 *Imperative Form*

This form is recommended for giving detailed directions for chemical analysis and test procedures.

Example:

'Weigh accurately about 0.5 g of the material and mix with 0.5 g of ammonium chloride in a 50 ml beaker. Add 5 ml of hydrochloric acid, cover the beaker and heat over a water bath for 15 minutes.'

8.7.13 *Use of Foreign Words*

Words of languages other than English using Roman characters shall be reproduced as they are written in the original languages, care being exercised, in particular, to retain diacritical marks wherever they occur.

8.8 Graphical Symbols, Letter Symbols and Abbreviations

8.8.1 *Graphical Symbols* are pictorial symbols used to represent equipment, quantities, circuit connections, arrangements, etc, supplemented, where necessary, by letters and numerals.

Letter Symbols, are letters used to represent physical quantities and chemical elements in equations and formulae.

Abbreviations, are shortened forms of names or expressions employed in the text, tables and elsewhere.

8.8.2 Standard graphical symbols and letter symbols specified in relevant Indian Standards, shall be used. Wherever such standard symbols are not available, symbols commonly used in technological and commercial practice should be used, but in any given standard use of symbols shall be consistent.

8.8.3 Abbreviations recommended for general use in Indian Standards are given in Annex B, which is not, however, intended to be exhaustive. For terms not included in the annex, new abbreviations may have to be adopted. In such cases care shall be taken that these terms do not clash with those already included in the annex or with those which represent by convention and practice other definite engineering or industrial terms.

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8.8.4 Whenever an uncommon abbreviation is used in an Indian Standard, at its first appearance it should be accompanied by a full expression of what it represents.

8.8.5 Abbreviations, in general, shall be used without a full stop after them (*see* Annex B) except in cases where the abbreviation results in a common English word or in an ambiguity as in the following cases:

- a) No. *for* number or numbers; and
- b) Fig. *for* figure.

8.8.6 *Clarity*

Abbreviations shall not be used where the meaning is likely to be obscured. In cases of doubt, words should be spelt out in full.

NOTE — Abbreviations ‘i.e.’, ‘e.g.’ and ‘viz’ shall not be used. Instead, the words ‘that is’, ‘for example’ and ‘namely’ shall be used in their place respectively.

8.8.7 *Use in Text*

Abbreviations shall be used sparingly in the text and captions, with due regard to usage in industry. Terms denoting units of measurements shall be abbreviated in the text when preceded by the amounts indicated in numerals. In tables and figures, the use of abbreviations may be governed by the need for conserving space.

8.8.8 *Singular and Plural*

The same abbreviation shall be used both for singular and plural words, except that the abbreviation for Rupee shall be Re and for Rupees, Rs.

Examples:

Incorrect — 10 Kgs, Nos. 15 to 30, 10 Nos.
Correct — 10 Kg, No. 15 to 30, 10 No.

8.8.9 *Letter Spacing*

The letters of abbreviations shall neither be spaced nor punctuated.

8.8.10 *Abbreviations in Titles*

In general abbreviations should be avoided in the titles of standards.

8.9 Textual References

8.9.1 *References to Parts of the Text*

Reference to other parts of the text in a standard shall be made by the use of a clause number printed in bold type, without a qualifying description like ‘clause’. The word “see” to refer shall be in italics.

Examples:

- 1) *see* **3.2**; and
- 2) *see* **A-2.4** (when part of an annex is referred to).

8.9.2 *References to Tables and Figures*

Every table and figure included in an Indian Standard shall be referred to in the text and a suitable explanation given as to its use. The words 'Table' and 'Fig.' shall not be in bold type. Example given below indicate the forms to be used for such references:

Examples:

- 1) ...as specified in Table 2; and
- 2) ...as shown in Fig. 3.

8.10 Presentation of Notes

Notes shall be printed in smaller type than that of the main text and shall immediately follow the relevant subject matter. When more notes appear under the same clause, subclause, table or figure, they shall be placed under the title 'NOTES', this word being on a line by itself. The text of each note shall then be preceded below it only by its number in Hindu-Arabic numerals in bold at the beginning of its first line.

In case of a single note the matter shall be separated from the word 'NOTE' by '—'.

Footnotes shall be distinguished by superior Hindu-Arabic numerals followed by one parenthesis starting afresh on each page. Footnotes shall be referred to in the text by inserting the same numerals as superscript after the word or sentence in question.

Care should be taken in the wording and location of a note to make clear the subject matter to which it refers. Otherwise it is not always certain whether a note following, for example, three subclauses, refer to all three of them or to the last one only, or possibly the last two. If there is any doubt, wording such as 'note to **8.5.1**' should be used or the words '(see Note)' should be inserted in the text at the appropriate point(s).

8.11 List of Items

List of items generally fall into one of the following two types:

- a) A list comprising grammatically incomplete elements that do not form complete sentences. These are introduced by a statement ending with a colon. Each item in the list starts with a lower case letter and ends with a semicolon, except the last item which ends with a full point; and
- b) A list that consists of items comprising one or more sentences each, but in which the items are not sufficiently independent or self-contained to become subclauses. These are introduced by a complete sentence ending with a full point and each item in the in the list starts with a capital letter and ends with a full point.

NOTE — This clause is an example of a type (b) list. Type (a) and Type (b) styles are not to be mixed within a single list.

The items in a list are identified by lower case letters in parenthesis, that is 'a)', 'b)', 'c)', etc., but letters 'i', 'l', 'o' and 'x' shall not be used. If it is necessary further to subdivide an item, Hindu-Arabic numerals in parentheses are used, that is '1)', '2)', '3)', etc. In exceptional cases, further subdivision is indicated by the use of small Roman numerals in parentheses, that is 'i)', 'ii)', 'iii)', etc. If more than one list of items appears within the same clause or subclause, items in the first list are identified by lower case letters and the second list by Hindu-Arabic numerals, all in parentheses as shown above. In such circumstances care has to be taken not to subdivide items so that similar identifiers are used in several lists. If more than three appear within the same clause or subclause, redrafting should be considered to avoid the complications of identification and referencing.

NOTE — Additional guidance on listing, in the special context of the explanation of symbols in mathematical formulae, is given in 9.3.

8.12 Illustrations

8.12.1 Captions

All illustrations in a given standard shall be designated as figures and abbreviated as 'Fig.' They shall be consecutively numbered in Hindu-Arabic numerals. Grouping of figures as 1A, 1B, etc. should be done only in unavoidable circumstances as in the case of a figure illustrating a number of parts relating to the same object. Captions in upper and lower letter in bold shall be placed at the bottom of figures.

Example:

- 1) Fig. 7 Disposition of Apparatus for Distillation (in typescript); and
- 2) Fig. 7 DISPOSITION OF APPARATUS FOR DISTILLATION (in print).

8.12.2 In preparing the originals, captions shall be typed or neatly written in hand on the back of the figures in full and the full text of all the captions shall be included in the manuscript. No information pertaining to figure shall appear below the caption.

8.12.3 Position in Text

In the printed standard, each figure shall be placed as near the first reference to it in the text as possible without needlessly breaking into a parts. Necessity for turning over a page to refer to a figure should be avoided.

8.12.4 Position of figures in the text shall be clearly indicated in the manuscript. The figure number and the caption along with the figure, shall be typed in between two thick lines in the following manner:

'All dimensions in millimeters'

Inside Dia	High	Nominal Thickness of Sheet	
		Standard Grade	Utility Grade
190	55	1.25	0.90
230	65		
265	75		

8.13 Titles/Headings of Items, Clauses, Subclauses and Sub-subclauses

The following procedure shall be followed in the display of such headings in a standard.

8.13.1 Item

All words in the heading of an item shall be in capitals, and shall be printed in bold face.

8.13.2 Clause

Initial letters of all principal words in the heading of a clause shall be given in capitals. All words in the heading shall be printed in bold face.

8.13.3 Sub Clause

Initial letters of all principal words in the heading of a subclause shall be in capitals. The heading shall be printed in italics.

8.13.4 Sub-subclause

Only the initial letter of the first word in the heading of a sub-subclause shall be in capital. The heading of sub-subclause shall also be printed in italics-

8.14 Indentation of Subdivisions

The numbers of an item, clause, sub clause and sub-subclause shall be aligned on the left-hand margin of the column. However, as an aid to composition of the printed text, lists and notes integrated in the text shall be inset from the margin. Example of layout of a typescript is given in Annex B.

9 STYLE AND LAYOUT FOR NUMERALS, UNITS AND MATHEMATICAL MATERIAL

9.1 General

In the presentation of numerals, units and mathematical material, primary aim is to achieve maximum clarity and to assist the reader to immediate comprehension.

9.2 Numerals and Units

The general rule in technical documents is that when numerals appear in the middle of a sentence they should not be spelt out.

9.2.1 Numerals associated with unit symbols shall be separated from the later by a space.

Examples:

1 m, 4 mm, 20 kg

NOTE — Numerals shall only be spelt out where their use may be confusing and ambiguous.

Examples:

- 1) Twelve 220 volt dc fans; and
- 2) Ten 50 ml beakers.

9.2.2 Numbers associated with algebraic symbols and symbols of physical quantities shall be expressed by numerals and shall not be separated by a space.

Examples:

10*B*, 3*xy*

9.2.3 Numbers where ever applicable shall always be accompanied by units. Dash ‘-’ shall not be used to define range within text. Example:

Example:

Recommended -

- a) 55 °C to 65 °C
- b) 55 °C - 65 °C
- c) 65 ± 5 percent

Not Recommended -

- a) 55 - 65 °C
- b) (65 ± 5) percent

NOTE - Word ‘to’ should be used for depicting range, however Dash (–) may be used in case of space limitations.

9.2.4 *Exponents*

Exponents shall be used in the abbreviations of units of measurements which are derived by multiplication of basic unit.

Examples:

For use in tables and figures : N/mm², N.mm⁻²
For use in general text: N/mm²

9.2.5 *Beginning of Paragraph or Sentence*

Starting a paragraph or a sentence with a numeral should be avoided as far as possible; if unavoidable, the number shall be spelt out.

9.2.6 *Fractions*

Simple fractions, such as 1/2, 1/3, 1/4, 2/3, 3/4 should ordinarily be spelt out as one-half, one-third, one-fourth, two-thirds, three-fourths in general text. More complex fractions should ordinarily be avoided and replaced by appropriate decimal fractions, but where their use in general text is unavoidable they may be given in numerals.

9.2.6.1 The rules given in **9.2.1** to **9.2.4** apply to fractions as well as to numerals.

9.2.7 *Decimals and Vulgar Fractions*

Decimals shall be used as a first choice; vulgar fractions may be used only when necessary because of usage in an industry. A zero (0) shall appear before the decimal point if it is not preceded by a numeral. Singular form shall be used for common fraction and decimals less than one and plural form shall be used for any number greater than one.

Examples:

Not Recommended — a) 25 ml
b) 1.1 man-day
c) 9/10

Recommended — d) 0.25 ml
e) 1.1 man-days
f) 0.9

9.2.7.1 When using numerals in association with units and symbols, the decimal form should be preferred to the use of fractions.

Example:

Not Recommended — $2\frac{3}{4}$ N

Recommended — 2.75 N

9.2.8 *Numerals of More than Three Digits*

Such numerals shall be given in groups of three with a space between every two consecutive groups; the grouping shall start from the unit towards left when there is no decimal point but when there is a decimal point, the grouping shall be made in both the directions from the decimal point. The use of punctuation marks like commas for breaking up numerals shall be avoided.

Examples:

Not recommended — a) 5,716, 500
b) 7652 54.37842
c) 251 6.7
d) 2.01 356
e) 125673

Recommended — a) 5 716 500
b) 7 625 254.378 42
c) 2 516.7
d) 2.013 56
e) 0.125 673

9.2.9 *Significance of Stated Values*

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Numerals representing values shall be stated indicating their full significance. All zeros appearing at the end of either an integer, or decimal fraction, are counted as significant, and it should be carefully noted that any specified value terminating in one or more zeroes implies that the last zero has a significance in the determination of the value and in its comparison with other values.

Examples:

- 1) 10, 50, 200 and 5 000 kg indicate accuracies of 0.5 kg each; and
- 2) 2.5, 3.50 and 6.460 mm indicate accuracies of 0.05, 0.005 and 0.0005 mm, respectively.

NOTE — For more detailed guidance on significance of values, refer to IS 787.

9.2.10 *Maximum Permissible Variations*

Where the maximum permissible variations in either direction from a basic value are equal, the symbol '±' shall be used to indicate the limits of tolerance, as for example 7.12 mm ± 0.06 mm. Where the permissible variations from the basic value are unequal, the following form shall be used.

$$5.250_{-0.003}^{+0.002}$$

9.2.10.1 In all cases, the basic value and the permissible tolerances shall be specified to the same order of accuracy.

9.2.10.2 Dimensions and tolerances shall be indicated in an unambiguous manner.

Examples:

- 1) 80mm x 25mm x 50 mm (not 80 x 25 x 50 mm);
- 2) 80 ± 2 mm;
- 3) 80 $^{+2}_0$ mm (not 80+ $^{+2}_0$ mm); and
- 4) 80 $^{+50}_{-25}$ mm.

9.2.11 In order to avoid misunderstanding, tolerances on percentages shall be expressed in a mathematically correct form.

Examples:

- 1) Write 'from 63 % to 67 %' to express a range.
- 2) Write 65 $^{+2}_{-2}$ % to express a centre value with tolerance. In neither case shall the form '65 ± 2 %' be used.

9.3 **Mathematical Material**

9.3.1 *Equations and Formulae*

Equations should be expressed in a mathematically complete, dimensionally balanced and unambiguous form. The meanings of the symbols used in an equation should be explained in a formal, consistent style immediately below the equation in which they appear (*see* Example in

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10.2.1.1). However, in a standard that contains a large number of equations making repeated use of several symbols, these symbols should be explained at the outset in a separate 'symbols and abbreviations' clause. The symbols used should be consistent with the applicable Indian Standards.

9.3.1.1 *Placing of formulae*

Formulae shall be placed in the Centre of the text with adequate space above and below, and followed by the definitions of symbols in the order in which the symbols occur in the formulae. The word 'where' shall be placed in the margin just above the definitions which shall be individually indented so that all equality signs are in alignment.

Example:

Calculate t from following formula:

$$t = \frac{pd_i}{2fj-p}$$

where

- t = shell thickness in mm,
- p = design pressure in MPa,
- d_i = inside diameter of the shell in mm,
- f = design stress in MPa; and
- j = joint factor

9.3.1.2 Italic letters shall be used in print for mathematical and quantitative (but not chemical) letter symbols, whether they are in the body of the text or mathematical equation, or are superscripts or subscript. But numerals in an equation in any position shall not be italicized.

9.3.1.3 No space is to be inserted between symbols that together represent a product of the individual symbols or between a number and the symbol it multiplies. A space is used on either side of a mathematical sign. Example given under **9.3.1.1** illustrates these general rules.

9.3.1.4 In a standard containing equations which require frequent reference, all of them should be numbered sequentially throughout the standard, including annexes, using Hindu-Arabic numerals in parentheses.

Example:

$$A = x + y + c^2 \quad \dots (1)$$

9.3.1.5 Equations should wherever possible be made to fit within the width of a single column of printed text. Where a substantial number of equations in a standard is too long to fit a single column, the entire text of the standard is composed across the double column width of the page.

If it is necessary to break an occasional equation that is too long for the next line, the break should be made at one of the following points:

- a) at =, >, ≈ and similar signs, in which case the sign appears only at the beginning of the 'turnover' line;
- b) at +, -, × and ÷ signs, the sign is inserted at the beginning of the second line; and

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- c) between adjacent brackets, in which case a multiplication sign is inserted at the end of the first line and again at the beginning of the second line.

Example:

$$f(x) = s[1 + \frac{1}{PD}\{E_1(b + x_2)\} X 4E_2(1 + x_3) + 4E_3(1 + x_4)]$$

9.3.2 *Solidus*

The use of solidus (/) can effect reduction of some displayed two-line expressions to single lines. However, when using the solidus scrupulous care is essential in the use of brackets and the order in which individual lines are placed.

9.3.3 *Superiors and Inferiors*

'Superiors' and inferiors' are printing terms referring respectively to indexes (superscripts) and suffixes (subscripts).

9.3.3.1 For fractional indexes, the solidus should be used. In the case of simple numerical fractions, where the normal upright form is generally clear.

Examples:

$$x^{a/b}, x^{1/2}, \left(\frac{a-b+c}{6}\right)^{\pi/2}$$

9.3.3.2 For expressions involving both superiors and inferiors, the superior appears to the right of the inferior rather than immediately above it. This does not apply to prime signs, which should always be closed to the term they relate to.

Example:

Not recommended — d^2_3

Recommended — d_3^2

9.3.4 *Alignment*

Series of equations shall be indented consistently, and aligned wherever possible on the '=' sign. Series of numerical values shall also be aligned wherever possible on the decimal point or order of magnitude.

Plus, minus, multiplication and equal signs, shall be aligned horizontally. All superiors and inferiors shall be similarly aligned and shall be of consistent size.

10 AMENDMENTS

10.1 Correction of errors and omissions, alterations and additions in the printed Indian Standards should all be made through amendments, if a revised edition of the standard is not called for. The amendments to each individual standard shall be numbered sequentially, starting with '1' for the first amendment to a given version. This information shall be presented in a format style at the head of the first page of the amendment and shall include the month and year of printing, and the designation and title of the relevant standard and the designation of the sectional

committee. The text of the amendment may, if necessary, be preceded by a description of the need or purpose of the said amendment.

10.2 General Elements of Amendments to a Standard

10.2.1 The wording used in amendments is a direct instruction to 'substitute' or 'insert' or simply 'delete' as appropriate. The words 'amend.....to read', 'change.....to' or 'the text' should be read asetc., shall not be used.

10.2.2 In each amendment, the instructions should be arranged in sequence of clauses, tables, figures, annexes, etc, as they appear in the standard. For helping in locating the features, page numbers may be indicated.

In the case of tables, figures, annexes, alphabetically arranged definitions of terms, etc. page reference shall be given as it helps in locating the feature in the standard easily.

10.2.3 For insertion, substitution or deletion of short portions of text, such as word, phrase or part of a sentence, the relevant text is included, within quotation marks, in the same sentence as the instruction.

For insertions, the location should be described with precision, for example, 'Insertbetween the second and third sentence'. The word 'add' shall not be used.

For deletions the precise extent of the deleted passage should be delineated either by description, for example, 'Delete entirely paragraph 2', or by giving the opening and closing words of the passage, for example, "delete, in lines 3 to 5, the text beginning, 'if fitted.....and ending, 'shall be of 25 mm diameter'".

For Substitution of existing word or phrase or clause by another word or phrase or clause the following should be described:

Substitute '-----' for '-----' (existing).

For large passages, for example, a complete sentence, paragraph or clause, the new text is placed on a separate line, preceded by the words 'Insert or Delete or Substitute the following'.

However, in order that the changes introduced are intelligible themselves, the alterations and substitutions shall desirably be given in the form of full sentences or even full clauses.

10.2.4 As a consequence of deletion or addition, of any clause, the subsequent clauses shall not normally be renumbered.

10.2.5 When amending tables, care is necessary to identify precisely the text to be altered. This can generally be done by making reference to the relevant column, for example, in column 12, row 'Length, and the row for example, 'in row 5', 'for nominal size 200'. However, unless the table is very long, and particularly for complicated tables, or if several alterations are to be made, the revised table or the appropriate portion of it shall be given as new matter for substitution.

10.2.6 If drawings are amended, the revised drawing shall be given in the amendment as new matter for substitution. If the alteration is not obvious, the instruction is accompanied by a statement, in words, of the nature of the change made in the drawing. Worded instructions alone are not sufficient.

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10.2.7 Some amendments include several pages of new material or, in the case of loose leaf standards, replacement sheets. In such cases, the top page of the amendment shall carry instructions to delete and substitute, remove and replace, as appropriate, and the new text is displayed on the following pages, separately from the instructions.

10.2.8 Reference shall be given in sentence form with 1st alphabet of 1st word in upper case and remaining words in lower case except the following words:

- a) Table
- b) Fig.
- c) Note
- d) Annex
- e) Sl. No

A typical example of an amendment is given below:

**AMENDMENT NO. 5 OCTOBER 1999
TO
IS 12269 : 1987 SPECIFICATION FOR 53
GRADE ORDINARY PORTLAND CEMENT**

(Page 2, clause 4.1) - Insert the following after the clause **4.1**:

4.2 Total chloride content in cement shall not exceed 0.1 percent by mass for cement used in structures other than prestressed concrete. For determination of chloride content in cement, IS 12423 may be referred.

NOTE — For use in special structures like prestressed concrete, where chloride is a critical parameter, the limit of chloride content shall be 0.05 percent and shall be required to be measured if desired by the purchaser.'

[Page 2, Table 1, Sl. No. (iii), col 3] - Substitute '3.0' for '2'.

[Page 2, Table 1, Sl. No. (iv), col 3] - Substitute '6.0' for '6'.

(Page 3, Notes 1 and 2 under clause 7.2) - Delete.

(CED 2)

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
2 : 1960	Rules for rounding off numerical values (<i>revised</i>)		supplementary elements (<i>first revision</i>)
787 : 1956	Guide for inter-conversion of values from one system of units to another	7840 : 1983	Technical drawings for glassware (<i>first revision</i>)
1275 : 1976	Rules for making alphabetical indexes (<i>first revision</i>)	7900 : 2001/ ISO 8601 : 2001	Data elements and interchange formats — Representation of dates and times (<i>second revision</i>)
1890 (Part 0) to (Part 13)	Quantities and units	10005 : 1994/ ISO 1000 : 1992	SI units and recommendations for the use of their multiples and of certain other units (<i>second revision</i>)
2381 : 1978	Recommendations for bibliographical references: Essential and		

ANNEX B

LIST OF ABBREVIATIONS AND SYMBOLS

	A		
acceleration due to gravity	<i>g</i>	centi (10 ⁻²)	c
alternating current (as adjective)	a.c.	centimetre	cm
American Society for Testing and Materials	ASTM	centimetre per second squared (acceleration)	cm/s ²
American National Standards Institute (USA)	ANSI	centistokes	cSt
ampere	A	Chemical Division Council (of BIS)	CHDC
ampere-hour	Ah	Civil Engineering Division Council (of BIS)	CEDC
ampere per metre	A/m	Codex Alimentarius Commission	CAC
angstrom (unit)	Å	Column	col
April	Apr	Committee on Conformity Assessment (of ISO)	CASCO
Association Francaise de Normalisation (France)	AFNOR	Committee on Consumer Policy (of ISO)	COPOLCO
Atmosphere, standard	atm	Committee on Information (of ISO)	INFCO
August	Aug	Committee on Reference Material (of ISO)	REMCO
average	avg	Committee on Standardization Principles (of ISO)	STACO
	B	Commission of the European Communities	EEC
British Standards Institution	BSI	concentrated	conc
British thermal unit	Btu	coulomb	C
	C		D
calorie	cal	deca (10)	da
candela	cd	December	Dec
candela per squaremetre	cd/m ²	deci (10 ⁻¹)	d
candle power	cp	decibel	dB

decimetre	dm	Intergovernmental Maritime Consultative Organization	IMCO
degree Celsius	°C		
Deutsches Institut für Normung (Germany)	DIN	International Electrotechnical Commission	IEC
Development Committee (of ISO)	DEVCO	International Federation for Application of Standards	IFAN
dilute	dil		
direct-current (as adjective)	d.c.	International Labour Organization	ILO
Directorate General of Supplies and Disposals	DGS&D	International Laboratory Accreditation Cooperation	ILAC
drawing	DRG	International Organization for Legal Metrology	OIML
E			
Economic and Social Commission for Asia and the Pacific	ESCAP	International Organization for Standardization	ISO
Electronics and Information Telecommunication Division Council (of BIS)	LITDC	ISO Information Network	ISONET
J			
Electrotechnical Division Council (of BIS)	ETDC	January	Jan
Export Inspection Council	EIC	Japanese Industrial Standards Committee	JISC
European Committee for Standardization	CEN	joule	J
European Norms	EN	July	Jul
F			
Farad	F	June	Jun
February	Feb	K	
Figure	Fig.	kelvin	K
Food and Agriculture Organization of the United Nations	FAO	kilo (10 ³)	k
Food and Agricultural Products Division Council (of BIS)	FADC	kilogram	kg
G			
gram	g	kilocalorie	kcal
ground level	GL	kilogram-force per square centimetre	kgf/cm ²
H			
Hardness, Brinell, Steel Ball	HBS	kilogram metre	kg.m
Hardness, Brinell, Hard Metal Ball	HBW	kilogram per cubic metre	kg/m ³
Hardness, Rockwell, B Scale	HRB	kilogram per square centimetre	kg/cm ²
Hardness, Rockwell, C Scale	HRC	kilolitre	kl
Hardness, Vickers	HV	kilometre	km
hecto (10 ²)	h	kilometres per hour	km/h
hertz	Hz	kilometres per litre	km/l
high frequency	HF	kilovolt	kV
high voltage	HV	kilovolt-ampere	kVA
hour	h	kilovolt per millimetre	kV/mm
I			
Institut Belge de Normalisation (Belgium)	IBN	kilowatt	kW
Institute of Standards and Industrial Research of Iran (Iran)	ISIRI	kilowatt hour	kWh
L			
		litre	l
		litres per kilometre	l/km
		logarithm (common)	log
		logarithm (natural)	log _e
		low frequency	LF

low voltage	LV	November	Nov
lumen	lm	number	No.
lumens per watt	lm/W	nanometre	nm
	M		O
Management and Systems Division Council (of BIS)	MSDC	October	Oct
March	Mar	ohm	Ω
maximum	Max	ohm-centrimetre	Ωcm
maximum water level	MWL		P
mean sea level	MSL	page(s)	P
Mechanical Engineering Division Council (of BIS)	MEDC	paise	p
Medical Equipment & Hospital Planning Division Council (of BIS)	MHDC	pascal	Pa
mega (10^6)	M	parts per million	ppm
megawatt	MW	Petroleum Coal and Related Products Division Council (of BIS)	PCDC
megawatt hour	MWh	pico (10^{-12})	p
megaohm	M Ω	picofarad	pF
Metallurgical Division Council (of BIS)	MTDC	poise	P
metre	m	precipitate	ppt
metre kilogram force	m.kgf	Production and General Engineering Division Council (of BIS)	PGDC
Metre-Kilogram-Second-Ampere (system)	MKSA		Q
metre per second	m/s	quintal	q
meter per second square (acceleration)	m/s ²		R
micro (10^{-6})	μ	radian	rad
microampere	μA	radian per second	rad/s
microfarad	μF	radius	r
microgram	μg	reactive kilovoltampere	kvar
micrometre (or micron)	μm	reactive voltampere	var
microvolt	μV	relative density	rd
microwatt	μW	relative humidity	RH
milliamperere	mA	Research, Designs and Standards Organization (Ministry of Railways)	RDSO
milligram	mg	revolutions per minute	rev/min
millilitre	ml	revolutions per second	rev/s
millimetre	mm	root mean square	rms
millivolt	mV	rupee(s)	Re (Rs)
minimum	Min		S
minute (time)	min	Second (time)	s
mole	mol	Section	Sec
	N	September	Sep
National Physical Laboratory	NPL	siemens	S
nano (10^{-9})	n	South African Bureau of Standards	SABS
newton	N	Standard	std

Standards Association of Australia	SAA	United Nations Conference on Trade and Development	UNCTAD
Standards Council of Canada	SCC		
Standards Institution of Israel	SII	United Nations Educational, Scientific and Cultural Organization	UNESCO
Standard wire gauge	SWG		
steradian	sr	United Nations Industrial Development Organization	UNIDO
stoke	St	United Nations International Children Emergency Fund	UNICEF
System Internationale	SI		
	T		V
Technical Barriers of Trade	TBT	Vacuum	vac
temperature	temp	vapour density	v.d.
Tesla	T	very high frequency	VHF/v.h.f.
Textile Division Council (of BIS)	TXDC	volt	V
tonne	t	volt-ampere	VA
The European Committee for Electrotechnical Standardization	CENELEC	volume	vol
			W
Transport Engineering Division Council (of BIS)	TEDC	watt	W
		watthour	Wh
turns per centrimetre	t/cm	weber	Wb
tuns per metre	t/m	World Health Organization	WHO
turns per decimetre	t/dm	World Trade Organization	WTO
	U	Water Resources Division Council (of BIS)	WRDC
Ultra high frequency	UHF		Y
United Nations Organization	UNO	Year	yr

.....(Title).....

1 SCOPE

[Redacted]

2 REFERENCES

[Redacted]

3 (Title)

3.1 (Title)

3.1.1 [Redacted]

3.1.2 [Redacted]

3.1.3 [Redacted]

3.2 (Title)

[Redacted]

a) [Redacted]

b) [Redacted]

[Redacted]

3.3 (Title)

[Redacted]

NOTE - [Redacted]

4 (Title)¹⁾

4.1 (Title)

4.1.1 (Title)

[Redacted]

4.1.2 (Title)

[Redacted]

NOTE 1 - [Redacted]

[Redacted]

NOTE 2 - [Redacted]

[Redacted]

4.2 (Title)²⁾

[Redacted]

4.3 (Title)

4.3.1 [Redacted]

4.3.2 [Redacted]

NOTES

1 [Redacted]

2 [Redacted]

3 [Redacted]

4.4 (Title)

[Redacted]

1) [Redacted]

2) [Redacted]

32

FOR BIS INT...
USED FOR S...
DEVELOPMENT PURPOSE

ANNEX D
LAYOUT OF FIRST COVER PAGE WITH CLAUSE REFERENCES

भारतीय मानक
Indian Standard

IS XXXX ---- : XXXX

Cl. No. 8.2

Cl. No. 6.1

हिन्दी शीर्षक

(.....)

Cl. No. 6.1

English Title

(.....)

Cl. No. 8.2

ICS

Cl. No. 8.2

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Cl. No. 8.2

..... XXXX

Price Group X

Margin

- Top → 0.5
- Bottom → 0.3
- Left → 0.9
- Right → 0.5

22 BI ← भारतीय मानक
 14 BI ← Indian Standard

IS 13450 (Part 2/Sec 35) : 2022
 ISO/IEC 12191-2-35 : 2021

(Superseding IS 2501 : 2009,
 IS 2502 : 2009 & IS 2503 : 2009)

16
 चिकित्सीय विद्युत उपस्कर

भाग 2 बुनियादी सुरक्षा और आवश्यक कार्य
 Yo णि ष्टम के लिए विशेष आवश्यकताएँ

अनुभाग 35 कंबल, पैड या गद्दे का उपयोग करने वाले
 चिकित्सयी उपयोग हेतु हीटिंग उपकरण

(पहला पुनरीक्षण)

20
 Medical Electrical Equipment

Part 2 Particular Requirements for Basic
 Safety and Essential Performance

Section 35 Heating Devices Using Blankets,
 Pads or Mattresses and Intended for Heating in
 Medical Use

(First Revision)

ICS 11.040.10; 11.140

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December 2022

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- B → Bold
- I → Italics
- Arial → English Font
- Kokila → Hindi Font
- 1.0 → Spacing

12B
 10I
 26
 22
 20
 20I
 18
 16
 14
 14I
 12
 12
 14
 12
 10
 11
 12B