# Draft Technical Corrigendum

ISO/IEC 13816:1996(E)

Information technology-Programming languages, their environments and system software interfaces-Programming Language ISLISP

#### 1. Page 1, before section 1.1

Add chapter number and title "1 Scope, Conventions and Compliance". [Note: It was lost during the final publication editing.]

2. Page 1, section 1.2

Replace the second reference "IEEE standard 754-1985. <u>IEEE standard for Binary floating point arithmetic. IEEE, New York, 1985</u>" with "IEEE standard 754-1985. Standard for binary floating point arithmetic". [Note: Use the standard format.]

3. Page 2, 3rd paragraph

Replace "A literal represents" with "A literal is represented by". [Note: Typo.]

4. Page 3, 5th paragraph

Replace "whose <u>values</u> obey" with "whose <u>arguments</u> obey". [Note: These are conventions for arguments.]

5. Page 4, section 1.4, 3rd paragraph

Replace "see §13.1 and §8" with "see §8 and §13.1". [Note: Change the order.]

6. Page 7, clause 1.7.22

Replace "ISLISP supports" with "ISLISP supports". [Note: Change the font.]

7. Page 7, clause 1.7.22

Replace "several superclasses" with "several direct superclasses".

8. Page 8, clause 1.7.28

Replace "the first element" with "The first element". [Note: Capitalize.]

9. Page 9, section 1.8.1, item (a), 2nd paragraph

Replace "the current expression" with "the current form". [Note: The previous paragraph uses "form" rather than "expression".]

10. Page 9, section 1.8.1, item (a), 2nd paragraph

Replace "<u>It</u> is implementation defined whether" with "<u>If no active handler is established</u> by with-handler, it is implementation defined whether". [Note: If an appropriate handler is established, the behavior is well defined.]

11. Page 11, 1st paragraph

Replace "by indenting  $C_2$  under  $C_1$  in Figure 1" with "by use of a directed arrow from  $C_1$  to  $C_2$  in Figure 1". [Note: The IS uses both "indentation" and "arrow" to express class relations. Use either one. Japanese Lisp WG prefers "arrow" because it is clearer than "indentation".]

# 12. Page 11, 5th paragraph

Replace "there is an edge from  $C_1$  to  $C_2$  iff  $\underline{C_1}$  is direct subclass of  $\underline{C_2}$ " with "there is an edge from  $C_1$  to  $C_2$  iff  $\underline{C_2}$  is direct subclass of  $\underline{C_1}$ ". [Note: Exchange " $C_1$ " and " $C_2$ ".]

### 13. Page 12, Figure 1

Replace the entire figure with Figure 1 of this corrigendum. [Note: See the Note for Item 11 above.]

## 14. Page 13, section 2.2, 3rd paragraph

Replace "as an instance of <built-in-class> or as an instance of <built-in-class>" with "as an instance of <built-in-class>". [Note: Duplicated.]

### 15. Page 14, section 3, 1st paragraph

Replace "an ISLISP text (see §1.3) within" with "an ISLISP text (see §1.3 and §1.7.37) within". [Note: §1.7.37 is also a good cross-reference.]

### 16. Page 15, section 3.3, 1st paragraph

Replace "required built-in functions, required built-in macros, and constants" with "required built-in functions, special operators, defining operators, and constants". [Note: What are called built-in macros in other languages are called special operators or defining operators in ISLISP.]

#### 17. Page 16, section 3.4

Add dynamic-let in the list of binding forms. The list should look as follows.

block	let	with-open-io-file
dynamic-let	let*	with-open-output-file
flet	tagbody	${\tt with-standard-input}$
for	with-error-output	${\tt with-standard-output}$
labels	with-open-input-file	

#### 18. Page 17, section 4.1, 2nd paragraph from bottom

Replace "The *operator* must be a special operator, <u>or</u> an identifier or a lambda expression" with "The *operator* must be a special operator, <u>a defining operator</u>, an identifier, or a lambda expression". [Note: The *operator* may be a defining operator.]

# 19. Page 17, section 4.1, 2nd paragraph from bottom

Replace "The identifier names a function, or a generic function" with "The identifier names a function, a macro, or a generic function". [Note: The identifier may name a macro.]

#### 20. Page 18, section 4.3

Add ignore-errors and set-dynamic in the list of special operators. The list should look as follows.

and	dynamic-let	let*	throw
assure	flet	or	unwind-protect
block	for	progn	while
case	function	quote	with-error-output
case-using	go	return-from	with-handler
catch	if	set-dynamic	with-open-input-file
class	ignore-errors	setf	with-open-io-file
cond	labels	setq	with-open-output-file
convert	lambda	tagbody	${\tt with-standard-input}$
dynamic	let	the	with-standard-output

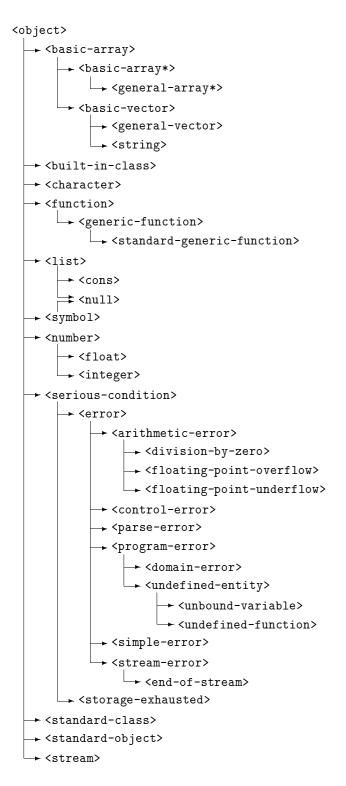


Figure 1: Class Inheritance

21. Page 19, section 4.5

Delete the sentence: "It is implementation defined whether any operator described by this document as a macro is implemented as a special operator (see §4.3)." [Note: No operator is described as a macro.]

22. Page 20, item (d)

Replace "The arguments are evaluated in order from left to right, yielding objects (sometimes called "actual arguments") to which the function will be applied" with "The arguments are evaluated in order from left to right". [Note: The second half "yielding ..." is unnecessary. In fact, the similar description in item (c) does not contain it. In addition, the term "actual arguments" is never used in the IS.]

23. Page 21, definition of function etc

Replace "named by <u>the identifier</u> function-name" with "named by function-name". [Note: The function-name may be a lambda list.]

24. Page 22, definition of labels etc, the header

Replace two occurrences of "body- $form\underline{s}$ " with "body-form". [Note: It is a sequence of body-form.] The header should look as follows.

(labels (( $\underline{function\text{-}name}\ \underline{lambda\text{-}list}\ \underline{form}^*$ )\*)  $body\text{-}form^*$ )  $\rightarrow$  <object> special operator (flet (( $\underline{function\text{-}name}\ \underline{lambda\text{-}list}\ form^*$ )\*)  $body\text{-}form^*$ )  $\rightarrow$  <object> special operator

25. Page 22, definition of labels etc, items list

In the first item, replace "bindings for the given  $\underline{funs}$ " with "bindings for the given  $\underline{function\text{-}names}$ ". [Note: " $\underline{function\text{-}name}$ " is used in the header.]

26. Page 22, definition of labels etc, 3rd paragraph

Replace "by the <u>function</u> activation" with "by the <u>special form</u> activation". [Note: labels and flet are special forms, but not functions.]

27. Page 23, definition of funcall, 2nd paragraph

Replace "Each <u>argument</u> may be any ISLISP object" with "Each <u>obj</u> may be any ISLISP object". [Note: "obj" is used in the header.]

28. Page 25, definition of defdynamic, Example

Replace "red" with "\*color\*" as the value of the first form "(defdynamic \*color\* 'red)". [Note: defdynamic returns the name of the variable.]

29. Page 25, definition of defun, 3rd paragraph

Replace "The free identifiers in the body" with "The free identifiers in the body <u>form\*</u>". [Note: The "body" of defun is not defined before.]

30. Page 26, definition of eq etc

Replace "if the  $\underline{objects}$  are the same" with "if the  $\underline{objects}$  are the same". [Note: Change the font.]

31. Page 27, 1st paragraph

Replace "the consequences are <u>undefined</u> if <u>either  $obj_1$  or  $obj_2$  is a number or a character"</u> with "the consequences are <u>implementation defined</u> if <u>both  $obj_1$  and  $obj_2$  are numbers or both are characters"</u>. [Note: "undefined" is an extreme. In addition, the original phrase after "if" is ambiguous.]

32. Page 27, items list

In the first item, replace "of the same class<u>es</u>" with "of the same class". [Note: Make it singular.]

33. Page 28, definition of equal, 2nd paragraph

Replace "If  $obj_1$  and  $obj_2$  are instances of the same classes" with "If  $obj_1$  and  $obj_2$  are direct instances of the same class". [Note: Since any object is an instance of <object>, this condition does not make sense without "direct". Also, make "classes" sigular.]

34. Page 28, definition of equal, 2nd paragraph

Replace "of the same classes but not eq1" with "of the same class but not eq1". [Note: Make it singular.]

35. Page 31, section 6.2, 1st paragraph

Replace "Variable bindings, or variables, are entities" with "Variable bindings are entities". [Note: "Variable bindings" and "variables" are different concepts. See section 1.7.4 in Page 6. Also, see Item 36 below.]

36. Page 31, section 6.2, 2nd paragraph

Replace "A **variable** is an association between an *identifier* and an ISLISP object and is denoted by that identifier" with "A **variable** is <u>used to refer to</u> an association between an *identifier* and an ISLISP object, and is denoted by that identifier". [Note: The definition of "variable" in the IS should be replaced with a widely acceptable one such as the one given here.]

37. Page 33, list of valid places for setf

Replace "(<u>accessor-name</u> instance)" with "(<u>reader-function-name</u> instance)". [Note: See the syntax definition of defclass in Page 46.]

38. Page 33, 1st paragraph after list of valid places for setf

Replace "the arguments of the <u>place</u> form" with "the arguments of the <u>function application</u> form". [Note: This sentence is talking about function application forms, but not general places.]

39. Page 33, Example

Replace two occurrences of "car" in comments with "car", and adjust indentation of the line with the second setf form. [Note: The "car" here is not a function name and therefore should be in Roman face if it appeared in ordinary text. Since the comments are written in Italic face, the "car" here should be in Italic face.] The example should look as follows.

```
(\text{setf (car x) 2}) \qquad \Rightarrow \qquad 2
In \ the \ cons \ x, \ the \ car \ now \ is \ 2.
(\text{defmacro first (spot)}) \qquad \Rightarrow \qquad \text{first}
(\text{setf (first x) 2}) \qquad \Rightarrow \qquad 2
In \ the \ cons \ x, \ the \ car \ now \ is \ 2.
```

40. Page 33, definition of let, 2nd paragraph

Replace "The forms form are evaluated" with "The forms are evaluated".

41. Page 33, definition of let, 2nd paragraph

Replace "the <u>forms</u> are evaluated" with "the <u>body-forms</u> are evaluated". [Note: "body-form\*" is used in the header and the IS sometimes refers to "X\*" as "Xs".]

42. Page 33, definition of let, Note

Add a missing closing parenthesis for the second let form. The Note should look as follows.

```
 \begin{array}{lll} (\text{let ()} \ body\text{-}form^*) & \equiv & (\text{progn } body\text{-}form^*)^3 \\ (\text{let (}(var_1 \ form_1) & \equiv & ((\text{lambda } (var_1 \ var_2 \ \dots \ var_n) \\ & & body\text{-}form^* \\ & & \dots & \\ & (var_n \ form_n)) & \\ body\text{-}form^*) & \\ \end{array} ) \ form_1 \ form_2 \ \dots \ form_n)^4 \\
```

43. Page 34, definition of let\*, 1st paragraph

Replace "The scope of an identifier var is the body excluding nested regions of var, if any, along with" with "The scope of an identifier var is the body along with". [Note: Use the simpler definition of "scope", which is used in the definition of let.]

44. Page 34, definition of let\*, 2nd paragraph

Replace "These <u>definitions</u> enlarge the set of current valid identifiers perhaps shadowing previous <u>definitions</u>" with "These <u>variable bindings</u> enlarge the set of current valid identifiers perhaps shadowing previous <u>variable bindings</u>". [Note: "Definition" here does not make sense.]

45. Page 34, definition of let\*, 2nd paragraph

Replace "in this enlarged or modified environment the <u>forms</u> are executed" with "in this enlarged or modified environment the <u>body-forms</u> are executed". [Note: "body-form\*" is used in the header and the IS sometimes refers to "X\*" as "Xs".]

46. Page 34, definition of let\*, Note

In the second equivalence relation, replace the four closing parentheses in Roman face with those in Type face. Also, replace "..." with "...". [Note: The spaces between dots are different.] The second equivalence relation should look as follows.

```
egin{array}{lll} 	ext{(let* (($var_1$ form_1))} & \equiv & 	ext{(let (($var_1$ form_1))} \ & & 	ext{(let (($var_2$ form_2))} \ & & & 	ext{...} \ & & & 	ext{($var_n$ form_n))} \ & & & 	ext{(let (($var_n$ form_n))} \ & & & 	ext{body-form*)} \ & & & 	ext{body-form*)}...)) \end{array}
```

47. Page 34, footnote 4

Replace "see 5.6.d" with "see  $\S 4.7$ ". [Note: There is no reference point that corresponds to "5.6.d".]

48. Page 35, definition of (setf (dynamic ...) ...), the header

Add set-dynamic. The header should look as follows.

```
\begin{array}{ll} (\texttt{setf (dynamic } \underline{var}) \ form) & \rightarrow < object> & \mathbf{special form} \\ (\texttt{set-dynamic } form \ \underline{var}) & \rightarrow < object> & \mathbf{special operator} \end{array}
```

49. Page 37, equivalence relations for cond

Enlarge asterisks. The equivalence relations should look as follows.

50. Page 39, definition of for, 4th paragraph

Replace "The for <u>macro</u> is executed" with "The for <u>special form</u> is executed". [Note: for is a special form, but not a macro.]

51. Page 40, section 6.7.1, 1st paragraph

In the table, replace "block <u>tag</u>" with "block <u>name</u>". [Note: The IS uses the term "name" rather than "tag" for blocks. See the definitions of block and return-from.]

52. Page 42, definition of catch etc, 1st paragraph

Replace "A catch tag may be any object other than a number or a character" with "A catch tag may be any object other than a number or a character; the comparison of catch tags uses eq". [Note: The description in the fifth paragraph in the definition of catch etc is duplicated. Delete the entire paragraph and merge the contents to the first paragraph.]

53. Page 42, definition of catch etc, 2nd paragraph

Replace "produce a <u>catch tag</u>" with "produce a <u>catch tag</u>". [Note: Change the font. "catch tag" is already defined in the first paragraph.]

 $54.\ Page\ 42,\ definition\ of\ {\it catch}\ etc,\ 4th\ paragraph$ 

Replace three occurrences of " $C_i$ " with " $C_1$ ". Also, replace " $R_i$ " with " $R_1$ ". [Note: There is no reason for using general subscript "i" here.]

55. Page 42, definition of catch etc, 5th paragraph

Delete the entire paragraph. [Note: See Item 52 above.]

56. Page 43, definition of tagbody etc, 2nd paragraph

Add a period at the end of the paragraph.

57. Page 43, definition of tagbody etc, 4th paragraph

Replace "a form  $\underline{(go\ tag_i)}$  can be" with "a form  $\underline{(go\ tag)}$  can be". [Note: Change the font. In addition, there is no reason for using general subscript "i" here.] Also, replace the other two occurrences of " $tag_i$ " with "tag".

58. Page 43, definition of tagbody etc, Note

Replace "that <u>parallels the</u> unstructured imperative transfer of control" with "that <u>uses</u> unstructured imperative transfer of control". [Note: "parallels" may cause confusion.]

59. Page 43, definition of tagbody etc, Note

Delete "that these facilities provide". [Note: "these facilities" does not make sense.]

60. Page 44, definition of unwind-protect, Note

Replace "respect these cleanup-forms" with "respect these cleanup-forms". [Note: Change the font.]

61. Page 46, definition of defclass, the syntax table

Add a line "boundp-function-name ::= identifier" between syntax definitions for writer-function-name and class-opt.

62. Page 49, section 7.1.3, 3rd paragraph, items list

In the first item, replace "C's class precedence list of the classes that define them" with "C's class precedence list". [Note: Delete the redundant clause.]

63. Page 50, 4th paragraph

Replace "ISLISP provides a default method combination type <u>and provides</u> a facility for declaring new types of method combination" with "ISLISP provides a default method combination type <u>but does not provide</u> a facility for declaring new types of method combination". [Note: ISLISP does not provide such a facility.]

64. Page 50, section 7.2.1, 1st paragraph

Delete "or its argument precedence order". [Note: There is no way to specify argument precedence order.]

65. Page 50, definition of defgeneric, the syntax table

Replace the first line of the syntax definition for option with "option ::= (:method-combination  $\{identifier \mid keyword\}$ ) |". [Note: "Symbol" should be "identifier" according to the convention of the IS (see, for example, the syntax definition of defclass in Page 46). Also, keywords can be specified as method combination (see the second item of the items list in Page 51).]

66. Page 51, definition of defgeneric, the syntax table

Replace the syntax definition for method-qualifier with "method-qualifier ::= identifier | keyword". [Note: Symbol can be used as a method qualifier in defmethod (see the fifth paragraph from bottom of Page 52) and method-qualifier in defgeneric is the same as that in defmethod (see the paragraph after the items list in Page 51).]

67. Page 51, definition of defgeneric, the syntax table

Add a line "var ::= identifier" at the end of the syntax table.

68. Page 51, definition of defgeneric, 5th paragraph

Delete the entire paragraph "Each method-desc defines ... in this context". [Note: The same description is given later.]

69. Page 51, definition of defgeneric, 2nd paragraph before section 7.2.2

Replace "All methods on the resulting generic function must have <u>lambda-lists</u> that are congruent with this shape" with "All methods on the resulting generic function must have <u>parameter-profiles</u> that are congruent with this shape". [Note: Methods are given <u>parameter-profiles</u>, but not lambda-lists.]

70. Page 52, definition of defmethod, the syntax table

Replace the syntax definition for method-qualifier with "method-qualifier ::= identifier | keyword". [Note: Symbol can be used as a method qualifier in defmethod (see the fifth paragraph from bottom of Page 52).]

71. Page 52, definition of defmethod, the syntax table

In the syntax definition for parameter-profile, replace "var" with "var". [Note: Change the font.]

72. Page 52, definition of defmethod, the syntax table

In the syntax definition for *parameter-profile*, replace the four parentheses in Roman face with those in Type face.

73. Page 52, definition of defmethod, the syntax table

Add a line "var ::= identifier" at the end of the syntax table.

74. Page 52, 6th paragraph from bottom

Replace "The <u>lambda-list</u> of the method being defined" with "The <u>parameter-profile</u> of the method being defined". [Note: Methods are given parameter-profiles, but not lambda-lists.]

75. Page 53, 1st paragraph

Delete the entire paragraph "Each method has ... required parameter". [Note: The terms defined here are never used.]

76. Page 53, section 7.2.2.1, 2nd paragraph

Replace "derived from the parameter <u>specializer names</u> as described above" with "derived from the parameter <u>profiles</u> as described above". [Note: "parameter profiles" is more precise. See the fourth paragraph from bottom in Page 52.]

77. Page 53, section 7.2.2.2, 1st paragraph

Replace "including the <u>lambda-list</u> of each method" with "including the <u>parameter profile</u> of each method". [Note: Methods are given parameter-profiles, but not <u>lambda-lists</u>.]

78. Page 53, section 7.2.3, 2nd paragraph

Replace "by using one of the method-defining forms" with "by using the defmethod form". [Note: ISLISP defines only defmethod as method-defining forms.]

79. Page 54, section 7.3.1, 2nd paragraph

Replace "If  $\underline{P_i}$  is a class, and if  $\underline{A_i}$  is an instance" with "If  $\underline{A_i}$  is an instance". [Note:  $\underline{P_i}$  is always a class.]

80. Page 54, section 7.3.1, 4th paragraph

Replace the entire sentence "A qualifier is any object other than a list; *i.e.*, any non-nil symbol or keyword" with "Any object after :method and before the first list in *method-desc* is regarded as a qualifier, but only non-nil symbols and keywords are accepted as qualifiers". [Note: Non-nil symbols and keywords are not the only objects other than lists.]

81. Page 55, section 7.3.3.1

Replace "the effective method <u>is</u> the most specific method" with "the effective method <u>calls</u> the most specific method". [Note: Typo.]

82. Page 56, items list

In the last item, replace "The value returned by the invocation of call-next-method in the least specific :around method <u>are those</u> returned by" with "The value returned by the invocation of call-next-method in the least specific :around method <u>is that</u> returned by". [Note: Editorial error.]

83. Page 57, 2nd paragraph

Replace "the method combination qualifier is nil" with "the method combination type is nil". [Note: Typo. See the definition of defgeneric in Page 51.]

84. Page 57, 3rd paragraph

Replace the sentences "The standard method combination type defines the next method as follows ... see §7.3.3" with "The standard method combination type defines the next method as specified in §7.3.3.2". [Note: The descriptions are not precise. §7.3.3.2 gives precise descriptions.]

85. Page 58, 2nd paragraph

Delete the entire paragraph including items list "ISLISP specifies system-supplied primary methods for each step ... a system-supplied primary method for initialize-object". [Note: The contents of this paragraph are given in Page 47 and in section 7.4.1 of Page 58. In addition, "each step" in the paragraph is misleading because the system-supplied primary method does not handle the first step "allocating storage for the instance".]

86. Page 58, last paragraph

Delete the entire paragraph "Methods for initialize-object can be... behavior of initialize-object". [Note: This paragraph is duplicated with the third paragraph of the definition of initialize-object in Page 59.]

87. Page 59, definition of initialize-object, 2nd paragraph

Replace "the :initform forms of the slots  $(\sec \S 7.4.1)$ " with "the :initform forms of the slots". [Note: The sentence itself is in  $\S 7.4.\overline{1.}$ ]

88. Page 59, definition of class-of

Replace three occurrences of "object" with "obj". [Note: Typo. See Page 3.]

89. Page 59, definition of instancep

Replace three occurrences of "object" with "obj". [Note: Typo. See Page 3.]

90. Page 62, 1st paragraph

Replace "In a the special form, the consequences are undefined if the value of form is not of the class or a subclass of the class designated by class-name (error-id. domain-error)" with "In a the special form, the consequences are undefined if the value of form is not of the class or a subclass of the class designated by class-name". [Note: No error-id should be specified if the consequences are undefined. In addition, the example in the definition says "the consequences are undefined".]

91. Page 63, items list

In the second item, replace "using the following: (create-string 1  $\underline{obj}$ )" with "using the following: (create-string 1 obj)". [Note: Change the font.]

92. Page 64, paragraph right before section 10.1.2

Replace "&rest, :rest, and keywords (e.g., :before and :after)" with "&rest and keywords (e.g., :rest, :before, and :after)" [Note: :rest is a keyword.]

93. Page 69, 1st paragraph

Replace "by (convert  $\leq$ float>z)" with "by (convert  $z \leq$ float>)". [Note: Change the argument order.]

94. Page 72, definition of sqrt, 1st paragraph

Replace "Returns the square root" with "Returns the <u>non-negative</u> square root". [Note: There are two square roots for each positive number.]

95. Page 73, definition of atan, 1st paragraph

Delete the sentences "This can be mathematically defined as follows ... for real-valued computations". [Note: ISLISP does not support complex numbers.]

96. Page 73, Note at the bottom

Delete the entire **Note** "Beware of simplifying this formula . . . is strictly negative". [Note: ISLISP does not support complex numbers.]

97. Page 74, Figure 3

Replace two occurrences of " $+\pi$ " with " $\pi$ ". [Note: Other positive numbers in the table are not prefixed with "+".]

98. Page 74, Figure 3

Replace "undefined consequences" with "implementation defined". [Note: See the definition of atan2.]

99. Page 74, definition of atan2, 4th paragraph

Replace "The signs of  $x_1$  (indicated as  $\underline{x}$ ) and  $x_2$  (indicated as  $\underline{y}$ ) are used" with "The signs of  $x_1$  (indicated as y) and  $x_2$  (indicated as  $\underline{x}$ ) are used". [Note: Exchange x and y.]

100. Page 75, last paragraph

Delete the entire paragraph "The following definition for ... if its imaginary part is strictly positive". [Note: ISLISP does not support complex numbers.]

101. Page 79, last line

Replace "(=  $\underline{z_2}$  (+ (\* (div  $z_1$   $z_2$ )  $z_2$ ) (mod  $z_1$   $z_2$ )))" with "(=  $\underline{z_1}$  (+ (\* (div  $z_1$   $z_2$ )  $z_2$ ) (mod  $z_1$   $z_2$ ))". [Note: Typo.]

102. Page 80, definition of gcd, 1st paragraph

Replace "the largest integer such z that" with "the largest integer z such that". [Note: Typo.]

103. Page 81, chapter 12, 1st paragraph

Replace the comma at the end of the paragraph with a period. [Note: Typo.]

104. Page 83, section 13.1, 1st paragraph

Replace "the left component is called <u>car</u> and the right component is called <u>cdr</u>" with "the left component is called <u>car</u> and the right component is called <u>cdr</u>". [Note: Change the font. The IS uses Roman font for car and cdr in other places.]

105. Page 83, section 13.1, 1st paragraph

Replace "denote the values in the <u>car</u> and <u>cdr</u> components" with "denote the values in the <u>car</u> and <u>cdr</u> components". [Note: Change the font. The IS uses Roman font for car and cdr in other places.]

106. Page 83, section 13.1, 1st paragraph

Replace "if the <u>cdr</u> value is nil" with "if the <u>cdr</u> value is nil". [Note: Change the font. "cdr" here denotes the object in the cdr component.]

107. Page 85, definition of set-car etc, 1st paragraph

Replace "The setf special form takes the place indicated by the selector car and updates the left component of an instance of the <cons>" with "Updates the left component of cons with obj". [Note: Define set-car as well. In addition, specify the new value for the place.]

108. Page 85, definition of set-car etc, 1st paragraph

Replace "The returned value is the result of the evaluation of obj" with "The returned value is obj". [Note: obj is already evaluated.]

109. Page 85, definition of set-cdr etc, 1st paragraph

Replace "The setf special form takes the place indicated by the selector cdr and updates the right component of an instance of <cons>" with "Updates the right component of cons with obj". [Note: Define set-cdr as well. In addition, specify the new value for the place.]

110. Page 85, definition of set-cdr etc, 1st paragraph

Replace "The returned value is the result of the evaluation of obj" with "The returned value is obj". [Note: obj is already evaluated.]

111. Page 86, definition of create-list, 1st paragraph

Replace "An error shall be signaled if i is not an integer (error-id. domain-error)" with "An error shall be signaled if i is not a non-negative integer (error-id. domain-error)".

112. Page 87, definition of reverse etc, Example

Remove the blank line right before the last line.

113. Page 90, definition of assoc, the header

Replace "<cons>" with "list>". [Note: assoc may return nil.] The header should look as follows.

(assoc obj association-list)  $\rightarrow < list>$ 

function

114. Page 90, explanation of <basic-array>, last line

Replace "subclasses of of chasic-array" with "subclasses of chasic-array". [Note: Typo.]

115. Page 92, definition of create-array, Example

Replace "(create-array '(2) 0.)" with "(create-array '(2) 0.0)".

116. Page 93, 1st paragraph

Replace " $d_i$  the <u>i</u>th dimension" with " $d_i$  the <u>i</u>th dimension". [Note: Change the font.]

117. Page 93, definition of set-aref etc, 1st paragraph

Replace "With setf the object obtainable by aref or garef, respectively, is replaced" with "These replace the object obtainable by aref or garef with obj. The returned value is obj". [Note: Define set-aref as well. In addition, specify the new value for the place and the returned value.]

118. Page 95, chapter 16, 2nd paragraph

Replace "representation of non-printable characters" with "representation of non-printing characters". [Note: Typo. See section  $\overline{12}$  in Page 81.]

119. Page 97, definition of char-index, the header

Replace "character" with "char". [Note: Typo. See Page 3.] The header should look as follows.

(char-index  $char\ string\ [start-position]$ )  $\rightarrow < object>$ 

function

120. Page 97, definition of char-index, 1st and 2nd paragraphs

Replace three occurrences of "character" with "char". [Note: Make them compatible with the corrected header. See Item 119 above.]

121. Page 97, definition of char-index, 1st paragraph

Replace "The function  $\underline{eql}$  is used" with "The function  $\underline{char=}$  is used". [Note: char= is more specific.]

122. Page 97, definition of string-index, 1st paragraph

Replace "sequential use of <u>eql</u> on" with "sequential use of <u>char=</u> on". [Note: char= is more specific.]

123. Page 98, definition of length, 3rd paragraph

Replace "Consistently with that, '(a b . c)  $\equiv$  (cons 'a (cons 'b 'c)) and (length '(a b . c))  $\Rightarrow$  2" with "For example, (length '(a b . c))  $\Rightarrow$  2, since '(a b . c)  $\equiv$  (cons 'a (cons 'b 'c))". [Note: "'(a b . c)  $\equiv$  (cons 'a (cons 'b 'c))" is the reason for "(length '(a b . c))  $\Rightarrow$  2".]

124. Page 99, definition of elt, the header

Delete the blank line in the header. The header should look as follows.

(elt sequence z)  $\rightarrow \langle object \rangle$ 

function

125. Page 99, definition of set-elt etc, 1st paragraph

Replace "The setf special form takes the place and updates this place with the result of the evaluation of obj" with "These replace the object obtainable by elt with obj. The returned value is obj". [Note: Define set-elt as well. In addition, specify the new value for the place. Finally, obj is already evaluated.]

126. Page 99, definition of set-elt etc, 1st paragraph

Delete the sentence "The integer z satisfies  $0 \le z < (length sequence)$ ". [Note: This condition is mentioned in the second paragraph.]

127. Page 99, definition of set-elt etc, 2nd paragraph

Delete the sentence "The returned value is the result of the evaluation of obj". [Note: See Item 125 above.]

128. Page 100, definition of map-into, the header

Replace "seq" with "sequence". [Note: Typo. See Page 3.] The header should look as follows.

 $(map-into\ destination\ function\ sequence^*) \rightarrow sequence$ 

function

129. Page 100, definition of map-into, 1st, 2nd, and 4th paragraphs

Replace four occurrences of "seqs" with "sequences". [Note: Make them compatible with the corrected header. See Item 128 above.]

130. Page 102, definition of with-standard-input etc, 1st paragraph

Replace "These <u>macros</u> first evaluate" with "These <u>special forms</u> first evaluate". [Note: with-standard-input etc are special forms, but not macros.]

- 131. Page 102, definition of with-standard-input etc, 1st paragraph
  Replace "return the stream s" with "returns the stream s". [Note: Typo.]
- 132. Page 102, definition of with-standard-input etc, 1st paragraph

  Add "The returned value of each of these forms is the result of the evaluation of the last form of their body (or nil if there is none)" at the end of the paragraph.
- 133. Page 103, definition of with-open-input-file etc, the header

  Replace "file" with "filename". [Note: Make them compatible with the headers for open-input-file etc.] The header should look as follows.

```
(\mbox{with-open-input-file } (\mbox{$name$ filename [element-class]) form*)$} \rightarrow <\mbox{$object$}>$ \mbox{special operator} (\mbox{with-open-output-file } (\mbox{$name$ filename [element-class]) form*)$} \rightarrow <\mbox{$object$}>$ \mbox{special operator} (\mbox{with-open-io-file } (\mbox{$name$ filename [element-class]) form*)$} \rightarrow <\mbox{$object$}>$ \mbox{special operator} (\mbox{$object$}>$ \mbox{$object$}>$ \mbox{$object$}>$
```

- 134. Page 103, definition of with-open-input-file etc, 1st paragraph

  Replace "Each of these <u>macros</u> opens" with "Each of these <u>special forms</u> opens". [Note: with-open-input-file etc are special forms, not macros.]
- 135. Page 103, definition of with-open-input-file etc, 1st paragraph
  Replace "respectively). evaluates the" with "respectively), evaluates the". [Note: Replace the period with a comma.]
- 136. Page 103, definition of with-open-input-file etc, 2nd paragraph
  Replace "file" with "filename". [Note: Make them compatible with the corrected header.
  See Item 133 above.]
- 137. Page 103, definition of with-open-input-file etc, 2nd paragraph

  Delete the sentences "Then the forms are ... is returned". [Note: Mentioned already in the first paragraph.]
- 138. Page 103, definition of with-open-input-file etc, 3rd paragraph

  Replace "from this macro is normal. For this reason, these macros are usually" with "from these special forms is normal. For this reason, these special forms are usually". [Note: with-open-input-file etc are special forms, but not macros.]
- 139. Page 105, definition of get-output-stream-string, Example

  Replace "(get-output-string-stream)" with "(get-output-stream-string
  out-str)". [Note: Correct the function name and give an argument.]
- 140. Page 108, definition of format etc, 1st paragraph

  Insert "It returns nil." after the first sentence. [Note: The examples say format returns nil.]
- 141. Page 110, section 19.3, 1st paragraph

  Replace "perform a character I/O operation" with "perform a binary I/O operation".

  [Note: This section is about binary I/O.]
- 142. Page 110, definition of read-byte, Example

  Replace "nil" with "implementation-defined" as the value of the third form "(close byte-example)". [Note: See the definition and examples of close in Page 103.]

143. Page 110, definition of read-byte, Example

Replace "97" with "101" as the value of the sixth form "(read-byte byte-example)". [Note: The ASCII code for "e" is 101.]

144. Page 111, definition of write-byte, Example

Replace "nil" with "implementation-defined" as the value of the form. [Note: See the definition and examples of close in Page 103.]

145. Page 111, definition of probe-file, Example

Replace "nil" with "implementation-defined" as the value of the third form "(close new-file)". [Note: See the definition and examples of close in Page 103.]

146. Page 111, definition of file-position, 2nd paragraph

Replace "increased by one each time  $\underline{a}$  one of" with "increased by one each time one of". [Note: Typo.]

147. Page 112, definition of file-position

In the second list of function calls, add a line "(report-condition condition stream)". [Note: report-condition also outputs characters.]

148. Page 112, 2nd paragraph

Replace "If a stream supports file positions, it is implementation defined which integer" with "It is implementation-defined which integer". [Note: The condition is mentioned in the next sentence.]

149. Page 112, definition of file-position, Example

Replace "nil" with "implementation-defined" as the value of the third form "(close example)". [Note: See the definition and examples of close in Page 103.]

150. Page 112, definition of file-position, Example

Replace "0" with "0 (implementation-defined)" as the value of the fifth form "(file-position example)". [Note: See the definition of file-position in Page 111.]

151. Page 112, definition of file-position, Example

Replace "1" with "1 (implementation-defined)" as the value of the seventh form "(file-position example)". [Note: See the definition of file-position in Page 111.]

152. Page 113, definition of file-length, the header

Replace "<integer>" with "<object>". [Note: file-length may return nil.] The header should look as follows.

(file-length filename element-class)  $\rightarrow$  < object>

function

153. Page 113, definition of file-length, 1st paragraph

Replace "if filname is not" with "if filename is not". [Note: Typo.]

154. Page 113, section 21.1, 4th paragraph

Replace "Conditions that represent implementation limitations that may not be symptomatic of program errors are called **serious conditions**" with "Error conditions and those conditions that represent implementation limitations that may not be symptomatic of program errors are collectively called **serious conditions**". [Note: Serious conditions include error conditions, see Figure 1 in Page 12.]

155. Page 114, section 21.2, 5th paragraph

Replace "it must <u>handle</u> the condition" with "it must <u>handle</u> the condition". [Note: Change the font. "handle" here is a general verb.]

156. Page 115, definition of cerror

In the equivalent code, delete the last closing parenthesis of the fourth line. [Note: Typo.]

157. Page 115, definition of cerror

In the equivalent code, replace "(create-string-output-<u>string</u>)" with "(create-string-output-<u>stream</u>)". [Note: Typo.]

158. Page 118, section 21.3.6

In the specification of <undefined-entity>, replace "a symbol representing of the identifier" with "a symbol representing the identifier". [Note: Typo.]

159. Page 120, specification for unbound-variable

Replace "is made to <u>refer to</u> an unbound" with "is made to <u>access</u> an unbound". [Note: Assignment may also cause this error.]

160. Page 120, specification for undefined-entity

Replace "when <u>a reference</u> to that entity is made" with "when <u>an access</u> to that entity is made". [Note: Assignment may also cause this error.]

161. Page 121, definition of get-internal-run-time etc, 1st paragraph

Replace "returns as an <u>integer</u> the" with "returns as an <u>integer</u> the". [Note: Change the font. There is no reason to use Italic font here.]

162. Index

Delete the entry for "<simple-error>". [Note: No other class names are included in the Index.]

163. Index

Merge duplicated entries for the following symbols in Roman font.

array, character, cons, float, integer, list, null, string, symbol, vector

164. Index

Replace "create-string-output-string" with "create-string-output-stream" and merge the entry with that of create-string-output-stream. [Note: The typo mentioned in Item 157 caused this error.]

165. Index

Add an entry for "writer (of a slot)". [Note: The Index contains entries for "reader (of a slot)" and "accessor (of a slot)".]

166. *Index* 

Add an entry for "set-dynamic".

167. *Index* 

Delete the entry for "handle". [Note: See Item 155.]

168. *Index* 

Delete the entries for "specialized lambda-list" and "specialized parameter". [Note: These appear only in the paragraph to be deleted. See Item 75.]