

program → PROGRAM_KW IDENTIFIER declarations_list procedure_list MAIN_KW block

declarations_list → declarations | declarations_list declarations

declarations → type_specifiers declarator_list ; | “empty”

type_specifiers → INTEGER_KW | REAL_KW | CHAR_KW | BOOLEAN_KW

declarator_list → declarator | declarator_list , declarator

declarator → dec | dec := initializer

dec → IDENTIFIER | IDENTIFIER [range] | IDENTIFIER [INTEGER_CONSTANT]

range → IDENTIFIER .. IDENTIFIER | INTEGER_CONSTANT .. INTEGER_CONSTANT
| arithmetic_expressions .. arithmetic_expressions

initializer → Initializer_list | { initializer_list }

Initializer_list → constant_expressions , initializer_list | constant_expressions

procedure_list → procedure_list procedure | “empty”

procedure → PROCEDURE_KW IDENTIFIER parameters { declarations_list block } ;

parameters → (declarations_list)

block → { statement_list }

statement_list → statement ; | statement_list statement ;

statement → IDENTIFIER := expressions |

IF_KW bool_expressions THEN_KW statement |

IF_KW bool_expressions THEN_KW statement ELSE_KW statement |

DO_KW statement WHILE_KW bool_expressions |

FOR_KW IDENTIFIER IN_KW range REPEAT_KW statement |

SWITCH_KW expressions caseelement default END_KW |

IDENTIFIER (arguments) |

RETURN_KW expressions |

EXIT_KW WHEN_KW (bool_expressions) | block | “empty”

arguments → declarator_list | “empty”

caseelement → CASE_KW INTEGER_CONSTANT : block ; | caseelement CASE_KW
INTEGER_CONSTANT : block ;

default → DEFAULT_KW : block ; | empty

expressions → constant_expressions | bool_expressions | arithmetic_expressions |
IDENTIFIER | (expressions)

constant_expressions → INTEGER_CONSTANT | REAL_CONSTANT |
CHAR_CONSTANT | BOOLEAN_CONSTANT

bool_expressions → expressions < expressions | expressions <= expressions |
expressions > expressions | expressions >= expressions |
expressions = expressions | expressions <> expressions |
expressions AND_KW expressions | expressions OR_KW expressions |
expressions AND_KW THEN_KW expressions |
expressions OR_KW ELSE_KW expressions |
NOT_KW expressions

arithmetic_expressions → expressions + expressions | expressions - expressions |
expressions * expressions | expressions / expressions |
expressions % expressions | - expressions