[1] <PROGRAM> → <IDENT><ENV><DATA><PROC>
[2] <IDENT> → identification division <END_INST> program-id. ID<END_INST> author. WORDS<END_INST> date-written. WORDS <END_INST>
[3] <WORDS> → ID <WORDS_LR>
[4] <WORDS_LR> → ID <WORDS_LR
[5] → ε
[6] → ID
[7] <END_INST> → .\n
[8] <ENV> → environment division<END_INST> configuration section<END_INST> source-computer. WORDS<END_INST> object-computer. WORDS<END_INST>
[9] <DATA> → data division<END_INST> working-storage section<END_INST> <VAR_LIST>
[10] <VAR_LIST> → <VAR_DECL> <VAR_LIST>
[11] → ε
[12] <VAR_DECL> → <LEVEL> ID pic IMAGE <VAR_DECL_TAIL>
[13] <VAR_DECL_TAIL> → value INTEGER<END_INST>
[14] → value INTEGER<END_INST>
[15] <LEVEL> → INTEGER
[16] <PROC> → procedure division<END_INST> ID section<END_INST> <LABELS> end program ID.
[17] <LABELS> → <LABEL><END_INST> <INSTRUCTION_LIST> <LABELS_LR>
[18] <LABELS_LR> → <LABEL><END_INST> <INSTRUCTION_LIST> <LABELS_LR>
[19] → ε
[20] → <LABEL><END_INST> <INSTRUCTION_LIST>
[21] <LABEL> → ID
[22] <INSTRUCTION_LIST> → <INSTRUCTION> <INSTRUCTIONLIST>
[23] → ε
[24] <INSTRUCTIONS> → <ASSIGNATION>
[25] → <IF>
[26] → <CALL>
[27] → <READ>
[28] → <WRITE>
[29] → stop run<END_INST>
[30] <ASSIGNATION> → move <EXPRESSION> to ID<END_INST>
[31] → compute ID = <EXPRESSION><END_INST>
[32] → add <EXPRESSION> to ID<END_INST>
[33] → subtract <EXPRESSION> from ID<END_INST>
[34] → multiply <ASSING_END><END_INST>
[35] → divide <ASSING_END><END_INST>
[36] <ASSIGN_END> → <EXPRESSION>,<EXPRESSION> giving ID
[37] <EXPRESSION> → <EXP_AND> <EXPRESSION_LR>
[38] <EXPRESSION_LR> → or <EXP_AND> <EXPRESSION_LR>
[39] → ε

[40] <EXP_AND> → <EXP_EQUAL> <EXP_AND_LR>
[41] <EXP_AND_LR> → and <EXP_EQUAL> <EXP_AND_LR>
[42] → ε
[43] <EXP_EQUAL> → <EXP_ADD> <EXP_EQUAL_LR>
[44] → = <EXP_ADD> <EXP_EQUAL_LR>
[45] → < <EXP_ADD> <EXP_EQUAL_LR>
[46] → > <EXP_ADD> <EXP_EQUAL_LR>
[47] → <= <EXP_ADD> <EXP_EQUAL_LR>
[48] → >= <EXP_ADD> <EXP_EQUAL_LR>
[49] → ε
[50] <EXP_ADD> → <EXP_MULT> <EXP_ADD_LR>
[51] <EXP_ADD_LR> → + <EXP_MULT> <EXP_ADD_LR>
[52] → - <EXP_MULT> <EXP_ADD_LR>
[53] → ε
[54] <EXP_MULT> → <EXP_NOT> <EXP_MULT_LR>
[55] <EXP_MULT_LR> → * <EXP_NOT> <EXP_MULT_LR>
[56] → / <EXP_NOT> <EXP_MULT_LR>
[57] → ε
[58] <EXP_NOT> → -<EXP_NOT>
[59] → not <EXP_NOT>
[60] → <EXP_PARENTHESIS>
[61] <EXP_PARENTHESIS> → (<EXPRESSION>)
[62] → <EXP_TERM>
[63] <EXP_TERM> → ID
[64] → INTEGER
[65] → true
[66] → false
[67] <IF> → if <EXPRESSION> then <INSTRUCTION_LIST> <IF_END>
[68] <IF_END> → else <INSTRUCTION_LIST> end-if
[69] → end-if
[70] <CALL> → perform ID <CALL_TAIL>
[71] <CALL_TAIL> → until <EXPRESSION><END_INST>
[72] → <END_INST>
[73] <READ> → accept ID<END_INST>
[74] <WRITE> → display <WRITE_TAIL>
[75] <WRITE_TAIL> → <EXPRESSION><END_INST>
[76] → STRING<END_INST>