|  |  |  |  |
| --- | --- | --- | --- |
|  | LHS | FIRST | FOLLOW |
| R1 | <Rat23S> | function, %, null | $ |
| R2 | <Opt Function Definitions> | function, null | % |
| R3 | <Function Definitions> | function | % |
| R3’ | <Function Definitions>’ | function, null | % |
| R4 | <Function> | function | %, function |
| R5 | <Opt Parameter List> | identifier, null | ] |
| R6 | <Parameter List> | identifier | ] |
| R6’ | <Parameter List>’ | Identifier, comma, null | ] |
| R7 | <Parameter> | identifier | ], comma |
| R8 | <Qualifier> | int, boolean, real | ], comma, id |
| R9 | <Body> | { | %%, function |
| R10 | <Opt Declaration List> | int, boolean, real, null | {, identifier, if, return, put, get, while |
| R11 | <Declaration List> | int, boolean, real | {, identifier, if, return, put, get, while |
| R11’ | <Declaration List>’ | int, boolean, real, null | {, identifier, if, return, put, get, while |
| R12 | <Declaration> | int, boolean, real | ; |
| R13 | <IDs> | identifier | :, ;, ), int, boolean, real |
| R13’ | <IDs>’ | comma, null | :, ;, ), int, boolean, real |
| R14 | <Statement List> | {, identifier, if, return, put, get, while | }, $ |
| R14’ | <Statement List>’ | {, identifier, if, return, put, get, while, null | }, $ |
| R15 | <Statement> | {, identifier, if, return, put, get, while | {, }, $, identifier, if, return, put, get, while, else, endif |
| R16 | <Compound> | { | {, }, $, identifier, if, return, put, get, while, else, endif |
| R17 | <Assign> | identifier | {, }, $, identifier, if, return, put, get, while, else, endif |
| R18 | <If> | if | {, }, $, identifier, if, return, put, get, while, else, endif |
| R18’ | <If>’ | else, endif | {, }, $, identifier, if, return, put, get, while, else, endif |
| R19 | <Return> | return | {, }, $, identifier, if, return, put, get, while, else, endif |
| R19’ | <Return>’ | ;, -, id, integer, (, REAL, true, false | {, }, $, identifier, if, return, put, get, while, else, endif |
| R20 | <Print> | put | {, }, $, identifier, if, return, put, get, while, else, endif |
| R21 | <Scan> | get | {, }, $, identifier, if, return, put, get, while, else, endif |
| R22 | <While> | while | {, }, $, identifier, if, return, put, get, while, else, endif |
| R23 | <Condition> | -, id, integer, (, REAL, true, false | ) |
| R24 | <Relop> | ==, ^=, >, <, =>, =< | -, id, integer, (, REAL, true, false |
| R25 | <Expression> | -, id, integer, (, REAL, true, false | ;, ), ==, ^=, >, <, =>, =< |
| R25’ | <Expression>’ | +, -, null | ;, ), ==, ^=, >, <, =>, =< |
| R26 | <Term> | -, id, integer, (, REAL, true, false | +, -, ;, ), ==, ^=, >, <, =>, =< |
| R26’ | <Term>’ | \*, /, null | +, -, ;, ), ==, ^=, >, <, =>, =< |
| R27 | <Factor> | -, id, integer, (, REAL, true, false | \*, /, +, -, ;, ), ==, ^=, >, <, =>, =< |
| R28 | <Primary> | id, integer, (, REAL, true, false | \*, /, +, -, ;, ), ==, ^=, >, <, =>, =< |
| R28’ | <Primary>’ | (, null | \*, /, +, -, ;, ), ==, ^=, >, <, =>, =< |