|  |  |  |  |
| --- | --- | --- | --- |
| Prod # | Variable | First | Follows |
| 1. | *program* | **program** | $ |
| 2.1 | *idlst* | **id** | **)** |
| 2.2 | *idlst’* | **,** | **)** |
| 2.3 | *idlst’* | ϵ | **)** |
| 3.1 | *declarations* | **var** | **procedure begin** |
| 3.2 | *declarations* | ϵ | **procedure begin** |
| 4.1 | *type* | **integer** | **; )?** |
| 4.2 | *type* | **array** | **; )?** |
| 5.1 | *standard\_type* | **integer** | **; )?** |
| 5.2 | *standard\_type* | **real** | **; )?** |
| 6.1 | *subdeclarations* | **procedure** | **begin** |
| 6.2 | *subdeclarations* | ϵ | **begin** |
| 7. | *subdeclaration* | **procedure** | **;** |
| 8. | *subprogram\_head* | **procedure** | **var procedure begin** |
| 9.1 | *arguments* | **(** | **;** |
| 9.2 | *arguments* | ϵ | **;** |
| 10.1 | *parameter\_list* | **id** | **)** |
| 10.2 | *parameter\_list’* | **;** | **)** |
| 10.3 | *parameter\_list’* | ϵ | **)** |
| 11. | *compound\_statement* | **begin** | **; . end else** |
| 12.1 | *optional\_statements* | **id call begin while if** | **end** |
| 12.2 | *optional\_statements* | ϵ | **end** |
| 13.1 | *statement\_list* | **id call begin while if** | **end** |
| 13.2 | *statement\_list’* | **;** | **end** |
| 13.3 | *statement\_list’* | ϵ | **end** |
| 14.1 | *statement* | **id** | **; end else** |
| 14.2 | *statement* | **call** | **; end else** |
| 14.3 | *statement* | **begin** | **; end else** |
| 14.4 | *statement* | **while** | **; end else** |
| 14.5 | *statement* | **if** | **; end else** |
| 15.1 | *variable* | **id** | **assignop** |
| 16.1 | *procedure\_statement* | **call** | **; end else** |
| 17.1 | *expression\_list* | **id num ( not + -** | **)** |
| 17.2 | *expression\_list’* | **,** | **)** |
| 17.3 | *expression\_list’* | ϵ | **)** |
| 18.1 | *expression* | **id num ( not + -** | **) ; end else do then ] ,** |
| 18.2 | *expression’* | **relop** | **) ; end else do then ] ,** |
| 18.3 | *expression’* | ϵ | **) ; end else do then ] ,** |
| 19.1 | *simple\_expression* | **id num ( not** | **) ; end else do then ] , relop** |
| 19.2 | *simple\_expression* | **+ -** | **) ; end else do then ] , relop** |
| 19.3 | *simple\_expression’* | **addop** | **) ; end else do then ] , relop** |
| 19.4 | *simple\_expression’* | ϵ | **) ; end else do then ] , relop** |
| 20.1 | *term* | **id num ( not** | **) ; end else do then ] , relop addop** |
| 20.2 | *term’* | **mulop** | **) ; end else do then ] , relop addop** |
| 20.3 | *term’* | ϵ | **) ; end else do then ] , relop addop** |
| 21.1 | *factor* | **id** | **) ; end else do then ] , relop addop mulop** |
| 21.2 | *factor* | **num** | **) ; end else do then ] , relop addop mulop** |
| 21.3 | *factor* | **(** | **) ; end else do then ] , relop addop mulop** |
| 21.4 | *factor* | **not** | **) ; end else do then ] , relop addop mulop** |
| 21.5 | *factor’* | **[** | **) ; end else do then ] , relop addop mulop** |
| 21.6 | *factor’* | ϵ | **) ; end else do then ] , relop addop mulop** |
| 22.1 | *sign* | **+** | **id num ( not** |
| 22.2 | *sign* | **-** | **id num ( not** |
| 23.1 | *else* | **else** | **; end else?** |
| 23.2 | *else* | ϵ | **; end else?** |
| 24.1 | *array* | **[** | **assignop** |
| 24.2 | *array* | ϵ | **assignop** |
| 25.1 | *express\_list\_option* | **(** | **; end else** |
| 25.2 | *express\_list\_option* | ϵ | **; end else** |