**CFG’S**

<S> <defs> CLASS\_ID<INH>{ <CLASS\_BODY> public static void maun(){<MST>} <CLASS\_BODY> } <defs>

<INH> : CLASS\_ID| Eps

<defs> <defs><class\_def><defs>|Eps

<CLASS\_BODY> <DEC>|<FUNC\_DEF>|<OBJ>|<CONSTRUCTOR>|Eps

<CLASS\_DEF> <AM> CLASS\_ID<INH>{<CLASS\_BODY>}

<MST> <SST><MST>|Eps

<SST> <DEC>|<FUNC>|<OBJ>|<FOR\_LOOP> |<WHILE\_LOOP>|<IF\_ST>

<OBJ> <DT> ID = new <DT> (<ARGS>);

<CONSTRUCTOR> <AM> ID(<ARGS>);

<CONSTRUCTOR\_CALLING> super(<ARGS>);|this(<ARGS>);

<ID> ID<X>;

<X> [<Z>]<X><Y>|.<X’>|Eps

<X’> ID<X><Y>|<FUNC><Y>

<Y> , ID<X>|Eps

<Z> <FUNC>|<E>|ID<X>|<CONST>

<ASSIGN\_ST> ID<X>=<V>|<FUNC><K>=<V>|ID<K>=<V>

<V> ID<X>|<FUNC><K>|<OE>|ID<K>

<K> [<Z>]<K>|.<K’>|Eps

<K’> ID<K>|<FUNC><K>

<DEC> <O\_Static><AM> <DT> ID<<M>;

<M> =<J><Y><M’>|=ID<J><M’>

<M’> <M’>|Eps

<J> <OE><Y>|ID<K><Y>|<CONST><Y>|<FUNC><M>

<Y> , ID <M>|Eps

<O\_ASSIGN\_ST> =<V>|Eps

<IF\_ST> if(<Cond>){<MST>} <O\_ELIF><O\_ELSE>

<O\_ELIF> el<IF\_ST>|Eps

<O\_ELSE> ELSE{<MST>}

<COND> <OE>|true|false

<FUNC> ID (<ARGS>);

<ARGS> Eps|<ARG><NEXT>

<ARG> <OE>

<NEXT> ,<ARGS>|Eps

<FUNC\_DEF> <O\_STATIC> <AM> <DT> ID(<ARGS>){<MST>}

<ARGS> Eps|<DT><X><NEXT>

<NEXT> ,<ARGS>|Eps

<X> ID<Y>

<Y> Eps|[<Z>]<Y>

<FOR\_LOOP> floop(<ASSIGN\_ST>;ID<X>ROP ID<X>;<INC\_DEC>ID<X>){<MST>}

<WHILE\_LOOP> wloop(<COND>){<MST>}

<OE> <AE><OE’>

<OE’> or <AE><OE’>|Eps

<AE> <RE><AE’>

<AE’> and <RE><AE’>|Eps

<RE> <E><RE’>

<RE’> ROP <E> <RE’>|Eps

<E> <T><X>

<X> <PM> T <X>|Eps

<T> <F> <T’>

<T’> <MDM> <F> <T’>|Eps

<F> ID<X>|<CONST>|<FUNC><X>|<INC\_DEC> ID <X> |ID<X> <INC\_DEC>|<OE>| not <F>

<DT> int |float|bool|char | CLASS\_NAME

<PM> +|-

<MDM> \*|/|%

<INC\_DEC> ++|--

<ROP> <|>|<=|>=|==