1.

(1) $X \rightarrow a$, predict-set($X \rightarrow a$) = first(a) = {a}

(2) $X \rightarrow b$, predict-set($X \rightarrow b$) = first(b) = {b}

2.

(1) $X \rightarrow W$, predict-set($X \rightarrow W$) = first(W) = {a}

(2) $X \rightarrow Z$, predict-set($X \rightarrow Z$) = first(Z) = {b}

(3) $W \rightarrow a$, predict-set($W \rightarrow a$) = first(a) = {a}

(4) $Z \rightarrow b$, predict-set($Z \rightarrow b$) = first(b) = {b}

3.

(1) $X \rightarrow WY$, predict-set($X \rightarrow WY$) = first(W)= $\{b, \varepsilon\}$

$= \{b, \varepsilon\} \setminus \{\varepsilon\} \cup \text{first}(Y)$

$= \{b\} \cup \text{first}(Y)$

$= \{b\} \cup \{a\}$

$= \{b, a\}$

(2) $W \rightarrow b$, predict-set($W \rightarrow b$) = first(b) = {b}

(3) $W \rightarrow \varepsilon$, predict-set($W \rightarrow \varepsilon$) = FOLLOW(W) = first(Y) ={a}

(4) $Y \rightarrow a$, predict-set($Y \rightarrow a$) = first{a} = {a}

4.

(1) $X \rightarrow WY$, predict-set($X \rightarrow WY$) = first(W) = $\{b, \varepsilon\}$

$=\{b, \varepsilon\} \backslash \{\varepsilon\} \cup$ first(Y)

$=\{b\} \cup$ first(Y)

$=\{b\} \cup \{a, \varepsilon\} = \{b, a, \varepsilon\}$

$=\{b, a, \varepsilon\} \backslash \{\varepsilon\} \cup$ FOLLOW(X)

$=\{b, a\} \cup$ FOLLOW(X)

$= \{b, a, \$\}$

(2) $W \rightarrow b$, predict-set($W \rightarrow b$) = first(b) = $\{b\}$

(3) $W \rightarrow \varepsilon$, predict-set($W \rightarrow \varepsilon$) = FOLLOW(W) = first(Y)

$= \{a, \varepsilon\}$

$= \{a\} \cup$ FOLLOW(X)

$= \{a, \$\}$

(4) $Y \rightarrow a$, predict-set($Y \rightarrow a$) = first{a} = $\{a\}$

(5) $Y \rightarrow \varepsilon$, predict-set($Y \rightarrow \varepsilon$) = FOLLOW(Y) = FOLLOW(X) = $\{\$\}$

5.

(1) $X \rightarrow W$, predict-set($X \rightarrow W$) = first(W) = $\{\varepsilon\}$

= FOLLOW(W)
= FOLLOW(X)
$= \{\$\}$

(2) $W \rightarrow \varepsilon$, predict-set($W \rightarrow \varepsilon$) = FOLLOW(W)

= FOLLOW(X)
$= \{\$\}$