

B Uhi fgW i hn']b'; YZU\ f. '? Ub UX]gW Y  
; c`Xfi hY`VYXfc\ h'; Y]h\ Y']b`< Ua a

9l dYfhY`8]YhYf`<]W\_a Ubb`k Ufbh`j cf`XYf`6YXfc\i b[ `Xi fW  
X]Y`? UbUX]gW Y'; c`Xfi hY`ja `B Uhi fgW i hn[ YV]Yh'; Y]h\ Y']b  
< Ua a "

6YXfc\i b[ `Xi fW`']bj Ug]j Y`DZ`Ub nYb`]a  
B Uhi fgW i hn[ YV]Yh'; Y]h\ Y

⇒a `B Uhi fgW i hn[ YV]Yh'; Y]h\ Y']b`< Ua a `g]Y\`h`g]W`X]Y`B Uhi f`Y]bYf  
Yfbgh\UZhYb`6YXfc\i b[ `[ Y[ YbØVYf.`8]Y`? UbUX]gW Y'; c`Xfi hYž  
Y]bY`']bj Ug]j Y`DZ`Ub nYž`VfY]hYh`g]W`i b`\_cbhfc``Yfh`Ui`g`i bX  
[ YZ\`fXYh`XUg`Ö\_c`c[ ]gW Y'; `Y]W [ Yk ]W h`'9l dYfhYb`k ]Y`8]YhYf  
<]W\_a Ubb`ZcfXYfb`Y]b`gW`bY`Yg`< UbXY`bž`i a `X]Y`Y]ba`U`][ Y': `cfU  
ni`gW`ØhnYb"

8]Y`F c``Y`']bj Ug]j Yf`B Ycd\mhYb

8]Y`? UbUX]gW Y'; c`Xfi hY`]gh`Y]bY`DZ`Ub nYž`X]Y`i fgdfØb[ `]W`i`Ui`g  
BcfXUa`Yf]\_U`ghUa`a`h`i bX`]a`'%-`" `>\`f\i bXYfh`]b`8Yi`hgW`UbX  
dcdi`Àf`k`i`fXY`"8]YgY`5fh`\Uh`X]Y':`À\`][`\_Y]hž`g]W`a`Ugg]j  
Ui`gni`VfY]hYb`i`bX`Y]b\Y]a`]gW`Y`DZ`Ub nYb`ni`j`YfXf`Àb[`Yb`"  
⇒j Ug]j Y`B Ycd\mhYb`]g]bX`5fhYbž`X]Y`b]W`h`b`UhØf`]W`i`]b`Y]bYa  
; YV]Yh`j`cf`\_ca`a`Yb`i`bX`Xi`fW`i`\fY`U`[`[`fYgg]j`Y`5i`gVfY]hi`b[`X`Ug  
²`\_cgmg]hYa`ghØfYb`\_ØbbYb`"<]W\_a Ubbž`Y]b`@UbXgW`UZhg[`Àf`hbYf  
i`bX`9l dYfhY`Ui`ZX]YgYa`;`YV]Yhž`]gh`VYgc`bXYfg`VYgc`f[`h`ØVYf`X]Y  
5i`gVfY]hi`b[`X]YgYf`DZ`Ub nY`]a`< Ua a`Yf`K`YghYb`i`bX`XYb  
Ub[`fYb`nYb`XYb`Gh`À`X`hYb"

6YXfc\i b[ `gY`hYbYf`5fhYb

æa`X]fY\_hYb`Ni gUa a Yb\Ub[ `a`h`X]YgYf`9bhk ]W\_`i b[ `ghY\h`XUg  
\_ VYf`YVYb`gY`hYbYf`DZUbNybUfhYbž`k ]Y`ni a`6Y]gd]Y`C fW ]XYYbž  
X]Y`ja` ; Y]h\Y`j cf\_ca a Yb``8]Y` ; c`Xfi hY`b]a a h`@YVYbgf`Ai a Y  
Y]bž`X]Y`Z0f`X]YgY`5fhYb`i bj Yfn]W\hVUf`g]bX``< ]W\_a Ubb`k Ufbh  
K Ybb`k ]f`b]W\h`UbXY`bž`k YfXYb`k ]f`]b`Y]b`dUUF`d\`fYb`bi f`bcW  
 ; c`Xfi hYb`Ui ZXYb`@]W\hi b[ Yb`gY\Yb``8Ug` ; Y]h\Y`[ ]`h`U`g`Y]bYg  
XYf`k Yfhj c``ghYb`BUhi fgW\i hn[ YV]YhY`]b`< Ua a`i bX`]gh`bUW  
Yi fcd`À]gW\Ya`F YW\h`U`g` : : <! ; YV]Yh`fi`cfU! : Ui bU!<UV]hUh  
 [ YgW\0hnh`

## 8 ]Y`F YU\_h]cb`XYf`GhUXh`< Ua a

Hfchn`XYf`U`Ufa ]YfYbXYb`G]hi Uh]cb`fYU[ ]Yfh`XUg`i a k Y`hUa h`XYf  
GhUXh`< Ua a`n0[ Yf`]W``8]Y` : `ÀW\Yž`Ui ZXYf`X]Y` ; c`Xfi hYb  
 [ YXY]\Ybž` [ Y\0fh`Y]bYa`df]j UhYb`6Yg]hnYf`i bX`i bhYf`]Y[ h`Y]bYa  
ZYgh[ Y`Y[ hYb`DZY[ Yd`Ub``@Ui h`8YhYZ`6i ff]W\hYfž`XYa`GdfYW\Yf  
XYg`i a k Y`hUa hgž`]gh`X]Y`b`ÀW\ghY`DZY[ YU\_h]cb`Yfgh`9bXY`5i [ i gh  
Ub[ YgYhnh``8]Y`GhUXh`\Uh`b]W\h`X]Y`6Yž [ b]gž`X]YgY`A U» bU\`a Yb  
j cfni n]Y\Ybž`Ui W`k Ybb`< ]W\_a Ubb`Y]bXf]b[ `]W`XUfUi Z`\]bk Y]ghž  
XUgg`X]Yg`ni`gd`Àh`gY]b`\_0bbhYž`i a`X]Y`5i gVfY]hi b[ `XYf` ; c`Xfi hYb  
ni`ghcddYb`

## DYfg0b`]W\Yg`9b[ U[ Ya Ybh`i bX 9bhh`Ai gW\i b[

< ]W\_a Ubb`\Uh`g]W\`VYfY]hg`U\_h]j`VYa`0\hž`X]Y`]bj Ug]j Y`DZUbN  
ni f0W\_ni`U`hYbž`]bXYa`Yf`Y]bnY`bY`V`0\YbXY`9I Ya d`UFY  
ni f0W\_[ YgW\b]hhYb`\Uh``8cW`XUg`i a k Y`hUa h`\Uh`]a`i bhYfgU[ hž  
X]Y`5i Zc fghi b[ gZ`ÀW\Y`ni`VYhfYhYb``8]Y` : `ÀW\Y`]gh`b]W\h`ja  
9][ Ybhi a`XYf`GhUXhž`i bX`g]Y`]gh`Ui g`Y]bYa` [ i hYb` ; fi bX`\_ca d`Yhh  
Y]b[ Yn`Ai bh`ž`Yf`\_`Àfh`6i ff]W\hYf``8]Yg`Z0\fh`VY]`< ]W\_a Ubb`ni  
9bhh`Ai gW\i b[ .` `W\`UVY`\_Y]b``hYfYggY`XUfUbž`a Y]bY`F YbhY`a ]h  
XYa`GhYW\Yb`j cb` ; c`Xfi hYb`ni`j YfVf]b[ Yb```W`a`0W\hY`Y]bY  
BUhi f`gY\Ybž`X]Y` [ YXY]\h`

## 8 Yf`5i gV`]W`Ui Z`X]Y`Ni`\_i bZh

8]Y`Dfc[ bcgY`ZØf`XUg`BUhi fgW`i hn[ YV]Yh]gh`b]W`h`fcg][ "  
<]W\_a Ubb`[ `Ui Vhž`XUgg`Xi fW`fYW`hnY]h][ Y`A U» bU`a Yb`Y]bY  
?cbhfc`Y`XYf`; c`Xfi hY`a Ø[ `]W`k`ÀfY" A Ub`\_Ubb`g]Y`nk Uf`b]W`h  
\_ca d`Yhh`cgk YfXYbž`UVYf`a Ub`\_ØbbhY`g]Y`nYfa ØfVYbž`k Ybb`a Ub  
fY[ Y`a`À»][ `Y]b[ fY]Zh ž`Yf`Ài hYfh`Yf" 8Yf`GdfYW`Yf`XYf`GhUXh]gh  
YXcW`g\_Ydh]gW`i bX`VYhcbhž`XUgg`X]Y`; c`Xfi hY`a ]h`Yfk Y]`Y`k Y]h  
j YfVfY]hYh]gh`i bX`g]W`b]W`h`j Ø`][ `ni fØW`Xf`Àb[ Yb``Àggh"

8]Y`8]g\_i gg]cb`i a`X]YgY`]bj Ug]j Y`DZUbny`V]YhYh`Y]bYb`k ]W`h][ Yb  
9]bV`]W`\_]b`X]Y`<YfUi gZcfXYfi b[ Yb`XYg`BUhi fgW`i hnYg`]b`i fVUbYb  
; YV]YhYb" 8]Y`Bchk YbX][ \_Y]hž`X]Y`6]cX]j Yfg]h`h`ni`VYk U`fYb`i bX  
X]Y`Y]b`Y]a ]gW`Y`:`cfU`ni`gW`ØhnYbž`]gh`U`hi Y`Yf`XYbb`Y" 9]b  
nØ[ ][ Yg`<UbXY`b`\_ØbbhY`b]W`h`bi f`XUg`; Y]h`Yž`gcbXYfb`Ui W`  
UbXYfY`GW`i hn[ YV]YhY`j cf`XYf`, VYfbU`a Y`Xi fW`]bj Ug]j Y`5fhYb  
VYk U`fYb"

8YhU]`g

6Ygi W`Yb`G]Y`i bg`Ui Z.`b!U[ "XY