

## K Ug`\_cghYh`X]Y`6YghY][ i b[ `XYf`GYj Yb Gi a a ]hg3

I bgYf`UbgÄgg][ Yf`6Yf[ ghY][ Yf`i bX`A ÖW`hY[ Yfb!G]YVYb!  
; ]dZY`ghØfa Yf`fYW`bYh`a ]h`NU`Ybž`k ]Y`j ]Y`Yg`\_cghYb`k ]fXž`  
X]Y`g]YVYb` ; ]dZY`ni `VYghY][ Yb`K Ug`\_cghYh`X]Y`6YghY][ i b[  
XYf`GYj Yb`Gi a a ]hg3`9hk U`%, "\$\$\$`I G8`[ YVYb`cXYf  
bY`a Yb`%\$"\$\$\$`I G8`" ? `YhhYfYf`\_ÖbbhYb`X]Y`?cghYb  
Yf`YV`]W`gYb`\_Ybž`]bXYa`g]Y`Ui Z`@ I i g`j Yfn]W`hYbž  
5Vghf]W`Y`a UW`Yb`i bX`fbcW`a Y`f`F]g]\_Yb`Y]b[ Y`Ybž`i a  
X]YgY`NU`i bhYf`%\$"\$\$\$`ni `Vf]b[ Ybž`UVYf`]W`Ya dZY`Y  
X]Yg`b]W`hi bX`k YfXY`g]W`Yf`]W`b]W`h`gc`W`Y`i bb`Öh][ Yb  
F]g]\_Yb`Y]b[ Y`Yb`" ðW`V]b`ni `XYf`cV][ Yb`NU`i [ Y`ca`a Ybž  
]bXYa`g]W`a ]f`ZØbZ`YhUV`]YfhY`]bhYfbUh]cbU`Y  
6Yf[ ZØ`fYfi bhYfbY`a Yb`a ]h`G]hn`]b`XYb`I G5ž  
; fc» Vf]hUbb]Yb`i bX`BYi gYY`UbX`Ub[ YgY`Yb`UVY`" ðW`UVY  
]fY`DfY]gY`/ Ua`d`^Y`d/

I bgYf`UbgÄgg][ Yf`6Yf[ ghY][ Yf`i bX`A ÖW`hY[ Yfb!G]YVYb!  
; ]dZY`ghØfa Yf`fYW`bYh`a ]h`NU`Ybž`k ]Y`j ]Y`Yg`\_cghYb`k ]fXž`X]Y  
g]YVYb` ; ]dZY`ni `VYghY][ Yb`

K Ug`\_cghYh`X]Y`6YghY][ i b[ `XYf`GYj Yb`Gi a a ]hg3`9hk U`%, "\$\$\$`  
I G8`[ YVYb`cXYf`bY`a Yb`%\$"\$\$\$`I G8`"

? `YhhYfYf`\_ÖbbhYb`X]Y`?cghYb`Yf`YV`]W`gYb`\_Ybž`]bXYa`g]Y`Ui Z  
@ I i g`j Yfn]W`hYbž`5Vghf]W`Y`a UW`Yb`i bX`fbcW`a Y`f`F]g]\_Yb  
Y]b[ Y`Ybž`i a`X]YgY`NU`i bhYf`%\$"\$\$\$`ni `Vf]b[ Ybž`UVYf`]W`  
Ya dZY`Y`X]Yg`b]W`hi bX`k YfXY`g]W`Yf`]W`b]W`h`gc`W`Y`i bb`Öh][ Yb  
F]g]\_Yb`Y]b[ Y`Yb`"

ðW`V]b`ni `XYf`cV][ Yb`NU`i [ Y`ca`a Ybž`]bXYa`g]W`a ]f`ZØbZ  
YhUV`]YfhY`]bhYfbUh]cbU`Y`6Yf[ ZØ`fYfi bhYfbY`a Yb`a ]h`G]hn`]b`XYb

I G5ž; fc»Vf]hUbb]Yb`i bX`BYi gYY`UbX`Ub[ YgY\Yb`\UVY"´≠X`\UVY  
]\fY`DfY]gY`ZØf`X]Y`6YghY][ i b[ `U`Yf`g]YVYb` ; ]dZY`  
ni gUa a Yb[ YghY`h`fk Ybb`a Ò[ `]W`Ui Z`XYbgY`VYb`F ci hYbŁi bX  
XYb`8i fW`gW`b]hh`VYfYW`bYh`%\*`&`%` - `~`"

<]bni`\_ca a Yb`X]Y`?cghYb`ZØf`:`i [ `i bX`5i gfØghi b[ ``8]Y`:`Ø[ Y  
\Àb[ Yb`bUhØf`]W`XUj cb`UVž`k c`g]W`X]Y`Y]bnY`bYb`DYfgcbYb  
Ui Z`U`hYbž`UVYf`a Ub`\_Ubb`XUj cb`Ui g[ Y\Ybž`XUgg`g]YVYb  
]bhYfbUh]cbU`Y`<]b!`i bX`F ØW`ZØ[ Y` ` \Ài Z[ `]b`XYf`<cW`gU]gcb`  
nk ]gW`Yb`+"\$\$\$`i bX`%&`\$\$\$\$`I G!8c`Uf`\_cghYb`"

≠`6Yni [ `Ui Z`X]Y`5i gfØghi b[ `]gh`j ]Y`Yg`gdYn]U`]g]Yfh`i bX`XU\Yf  
hY`i Yf"´≠X`\UVY`Ui Z`X]Y`j YfhfUi Yb`gk ØfX][ Y`9i dYfh]gY`j cb`5`Ub  
5fbYhh`ni fØW`\_ [ Y[ f]ZYbž`X]Y`5i gfØghi b[ g`]ghYb`XYf  
FY]gY`Y]hi b[ gi bhYfbY\`a Yb`Xi fW`\_Àa a h`i bX`a ]W`Ui Z`Y]bYb  
; fi bXVYhfU[ `j cb`%`\$\$\$\$`I G!8c`Uf`ZYgh[ Y`Y[ h`8]Yg`]gh`Y]b  
UVgc`i hYf`A ]bXYghVYhfU[ ž`\_ØbbhY` `i bX`k ]fX`k U\fgW`Y]b`]W`  
Yf\YV`]W`a Y\`f`gY]b`"

8UfØVYf`\]bUi g`VY]b\U`hYh`X]Y`i b[ YZÀ\fy`NU\`j cb`%, \$\$\$\$\$`I G!  
8c`Uf`\_Y]bY`ni gÀh`]W`Yb`?i fgY`cXYf`GW`i `i b[ Ybž`X]Y`Y]b  
?`YhhYfYf`a Ò[ `]W`Yfk Y]gY`VYbØh][ h`9g`Ybh\À`hUi W`\_Y]bY  
Nk ]gW`YbVYf[ Y`k ]Y`Y]bYb`j cf`Ài Z[ Yb`5W`hhUi gYbXYf` `k ]Y`7\c  
C mi`cXYf`A UbUg`i ` `X]Y`X]Y`a Y]ghYb`?`YhhYfYf`k ]f`\_]W`j Yfgi W`Yb  
gc`hYbž`VYj cf`g]Y`g]W`Ui Z`XYb`9j YfYgh`k U[ Yb`"

Bi f`9]bnY`dYfgcbYb`\_ØbbYb`YbhgW`Y]XYbž`k Y`W`Y`5i gV]`Xi b[ `g]Y  
VYbØh][ Yb"´≠X`\UVY`VYfY]hg`K ]bhYfVYf[ ghY][ Yf`\_i fgY`UVgc`j ]Yfh  
i bX`VYUVg]W`h][ Yž`k Y]hYfY`5`d]b`\_i fgY`i bX`?`YhhYf`\_i fgY`ni  
VY`Y[ Ybž`VYj cf`]W`a ]W`Ub`8YbU`]i bX`Di bWU`\_`JmU`VY[ YVY"´I a  
XUg`k Y]hYfY`HfU]b]b[ `Ui Z`5W`hhUi gYbXYfb`\_Øa a YfY`]W`a ]W`ž  
k Ybb`]W`a `@chc`[ Yk ]bbY`"

6]g\Yf`\UVY`]W`gcni gU[ Yb`X]Y` V]`][ Yb` `i bX` Y]bZUW`Yb`GYj Yb  
Gi a a ]hg`VYgh]Y[ Yb.`?`]ja UbXgW`Ufc`&\$%\$ž9`Vfi g`&\$%+`i bX  
5W`bWU[ i U`&\$&\$`G]Y`k UfYb`fY`Uh]j `Y]bZUW`ni `YffY]W`Yb`i bX  
YfZcfXYfhYb`\_Y]bY`Zcfh[ YgW`f]hhYbYb`VYf[ ghY][ Yf]gW`Yb  
: À\][ \_Y]hYb`cXYf`Y]bY`gdYn]Y`Y`5i gV]`Xi b[ ž`X]Y`hfi [ Yb`Ui W`

XUni `VY]ž`X]Y`?cghYb`j`Yf[ `Y]W\gk`Y]gY`b]YXf][ `ni `U`hYb`"

6Yf[                      ?cbh]bYbh                      <Ò\Y                      HYW\ b]\_"  
 GW\k`j]Yf][`\_]h

A ci bh'9j`YfYgh`	5g]Yb`	, ", ( , `a f&- "\$&- `: i » Ł	8 Unk`j]gW\Yb`]Y [`YbX`
5WŁbWU[ i`U`	GØXUa`Yf]_U`	*"- *%`a f&&" , ' , `: i » Ł	9]bZUW\`
8YbU`]	BcfXUa`Yf]_U`	*"%- ( `a f&\$" &&`: i » Ł	8 Unk`j]gW\Yb`]Y [`YbX`
?]`]a`UbXgW\Ufc`	5Z]_U`	) ", - ) `a fP%- " ( %`: i » Ł	9]bZUW\`
8Yf`9`Vfi`g`	9i`fcdU`	)"* ( &`a fP%, ") %\$`: i » Ł	9]bZUW\`
6Yf[ `J]bgcb`	5bhUf_h]g`	( ", - &`a fP*"\$) \$`: i » Ł	8 Unk`j]gW\Yb`]Y [`YbX`
Di`bWU_`łmU`	CnYUb]Yb`	( ", , ( `a fP*"\$&( `: i » Ł	: cfhgW\ f]h`]W\`

## 9f[`YVb]ggY`

- 8]Y`Xi`fW\gW\ b]h`]W\Yb`?cghYb`ZØf`X]Y`6YghY][ i`b[ `U`Yf`g]YVYb`; ]dZY`VYhfU[`Yb`%\*`&%"`-`~`"
- ?`YhhYfb`a`h`X]Ya`Vf]h]gW\Yb`Ci`hZ]h`łU[ [`YX`; `cVY`]gh`XUg`V]`][`ghY`XYf`ZØbZl`bhYfbY`a`Yb`ž`X]Y`k`]f`a`]h`%`+`)`+&`~`VYk`YfhYh`UVYb`"8]Yg`]gh`YXcW\`hY]`k`Y]gY`Ui`Z`X]Y`U`\_hi`Y`Y`GW\k`ÅW\Y`XYg`DZ`bXg`fłŁ`ni`fØW`ni`ZØ`fYb`"
- 8Ug`hYi`YfghY`ž`XUg`]W\`Y]b[`YgW\`Åhnh`UVY`ž`k`UfYb`%+(`"+`\$\$`l`G!8c`Uf`VY]`XYf`]b`5a`Yf]\_U`Ub`gÅgg][`Yb`F]Y]gY`Y]hi`b[`gZ]fa`U`FA`=9l`dYX]h]cbg`"
- 8i`fW\`XUg`A`]gW\Yb`i`bX`5bdUggYb`j`cb`:  
: Ø\fi`b[`gi`bhYfbY`a`Yb`\_cbbhY`]W\`X]Y`NU`U`i`Z`%` )`"-`\$`-`l`G!8c`Uf`gYb`\_Yb`"
- 8i`fW\`XYb`9]bgUhn`c`\_U`Yf`; i`]XY!Ci`hZ]hg`Ui`Z`?`]`]a`Ub`łUfc`ž`9`Vfi`gž`5WŁbWU[ i`Ui`bX`Di`bWU\_`łmU`i`bX`Xi`fW\`XUg`A`]gW\Yb`i`bX`5bdUggYb`j`cb`; i`]XY!l`bhYfbY`a`Yb`Ui`Z`XYb`j`YfV`Y]VYbXYb`XfY]; ]dZY`b`\_cbbhY`]W\`XYb`DfY]g`Ui`Z`%&`" , )`%l`G!8c`Uf`gYb`\_Yb`"

- 8 Yf'UVgc`i h'V]``[ ghY`K Y[ ž'XYb`]W` [ YZ bXYb` \UVYžk Uf - +") &\$`~ "8 ]Yg`bi mh`c\_U`Y': Ø\fyf'i bX`l bhYfbY\ a Ybž [ fi bX`Y[ YbXY`l bhYfghØhni b[ gdU\_YhY`i bX`j Yfn]W`hYh`Ui Z j ]Y`Y`XYf`@ l i g!`i bX`G]W`Yf\Y]hggmghYa YžX]Y`j cb YhUV`]YfhYfYb`l bhYfbY\ a Yb`i bX`l bhYfghØhni b[ gdU\_YhYb VYfY]h[ YghY`h`k YfXYb"
- 8 UfØVYf`\]bUi g`a ØggYb`?`YhhYfYf': `i [ \_cghYb`f+ "\$\$\$`V]g %&"\$\$\$`l G!8c``UfŁž`5i gfØghi b[ `fa ]bXYghYbg`%\$"\$\$\$`l G! 8c``UfŁ`i bX`ni g`Åh`]W`Yg`HfU]b]b[ `Y]bd`UbYb"

## G]YVYb` ; ]dZY``\_cghYb`a ]h` ; i ]XYg

5V[ YgY\Yb`j cb`dfcZYgg]cbY`Yb`6Yf[ ghY][ Yfb`\_Ubb`a Ub`XUj cb Ui g[ Y\Ybž`XUgg`X]Y`A Y\ f\Y]h`XYf`?`YhhYfYf`6Yf[ ZØ\fyf Yb[ U[ ]YfYb`k ]fXž`i a ` ]\bYb`ni `Y`ZYbž`X]Y`a Y]ghYb` `k Ybb`b]W`h U`Y` `XYf`g]YVYb` ; ]dZY``ni `Yf`\_]a a Yb"

: Øf`j ]Y`Y`?`YhhYfYf`]gh`Yg`Y]b][ Yfa U» Yb`d`Ui g]VY`ž`X]Y`Y]bZUW`YfYb ; ]dZY``XYg`?]`]a Ub`Ufcž`9`Vfi g`i bX`5W`bWU[ i U`c`bY`X]Y`j c`Y `c [ ]gh]gW`Y`l bhYfghØhni b[ `Y]bYg`6Yf[ ZØ\fyfi bhYfbY\ a Ybg`ni VYghY][ Yb`fb`Vk c`\`U`Y`6Yf[ ghY][ Yf`Ua `?]`]`a ]h`Y]bYa `]nYbn]YfhYb 6Yf[ ZØ\fyf`\_`YhhYfb`a ØggYbŁ"

8]Y`\ÅfhYfYb` ; ]dZY``j cb`8YbU`ž`Di bWU`\_`JmUž`J]bgcb`i bX`9j YfYgh YfZcfXYfb`Y`XcW`a ]h`n]Ya `]W`Yf`G]W`Yf\Y]h`X]Y`l bhYfghØhni b[ Y]bYg`6Yf[ ZØ\fyfi bhYfbY\ a Ybg"

B UhØf`]W` [ ]Vh`Yg`Ui Z`XYf`[ Ubnyb`K Y`h`8i hnYbXY`j cb dfcZYgg]cbY`Yb`F`Y]gY`Y]hYfbž`X]Y`]W`Ui g[ Y`UggYb`\UVYž`i bX`Yg \_Ubb`Xi fW`Ui g`a Ò[ `]W`gY]bž`Y]bYb`b]YXf][ YfYb`DfY]g`ni `Yfn]Y`Yb"

## 5ba Yf`\_i b[ Yb

- 5``Y`NU\`Yb`g]bX`]b`l G8
- 5``Y`NU\`Yb`c`bY`]bhYfbUh]cbU`Y': `i [ dfY]gY`fbi X[ Yh + "\$\$\$!%&"\$\$\$`~ `XUZØŁ
- 5``Y`NU\`Yb`c`bY`5i gfØghi b[ `i bX`?`Y]Xi b[ `fbi X[ Yh`UV %\$"\$\$\$`~ `XUZØŁ

- 57. '5VYbhYi YfVYfUhYf
- 55. '5`d]bY'6YghY][ i b[ Yb
- > . 'Ų[ [ YX'; `cVY'fK YWġgY`\_i fg'; 6D!l G8 'j Yfk YbXYhġ
- A A . '6Yf[ k U\b g]bb
- F A = 'F A ≠9l dYX]h]cbYb

	57	55	>	A A	F A =	8 i fWġgW \ b]h
? ]`ja Ub XgWġ Ufc	) "&) \$	("- \$\$\$	' ", \$\$\$	* ", \$\$\$	+"%\$\$\$	) ") +\$
9`Vfi g	(") \$\$\$	) "- ) \$	&") +&	) "*" +)	) "' \$\$\$	("+- -
5WġbWU [ i U	*"' ) \$	) "%\$\$\$	) "*" ( &	%\$" +) \$	+"&\$\$\$	+"\$\$\$ ,
8YbU`]	- "+\$\$\$	- "( \$\$\$	%\$" ) ) '	%\$" ) \$\$\$	- ", \$\$\$	- "- - %
Di bWU_ ŲmU	&*"- \$\$\$	&*"\$\$\$\$	%("*\$)	&&"- \$\$\$	&+"\$\$\$\$	&' "( , %
J]bgcb	(( "&) \$	(' "\$\$\$\$	(&"- * ,	(( ") \$\$\$	(( "' \$\$\$	(' ", \$(
9j YfYgh	*- "\$\$\$\$	+"\$\$\$\$	) +"(' &	*+"\$\$\$\$	+( "\$\$\$\$	*+"( , *
; YgUa h	%*) "- ) \$	%* (" ) \$	%' +) +&	%* , "%&)	%+( "+\$\$\$	%* &"%' -

8 ]Y '[ Øbgh][ ghY '5fhž`X]Y `GYj Yb `Gi a a ]hg`ni  
VYghY][ Yb

8 ]Y `i bhYbghY\YbXYb `DfY]gY `k YfXYb `i bhYf`XYf`5bbU\`a Y  
VYfYWġbYhž`XUgg?'`YhhYfYf`bUWġ`A Ò[ `]Wġ\_Y]h`c\_U`Y`5bV]YhYf`i bX  
; i ]XYg`bi hnYbž`bi f`ZØf`[ fi bX`Y [ YbXY`l bhYfghØhni b [ gdU\_YhY  
VYnU\`Yb `i bX`VYfY]h`g]bXž`Ui Z`j ]Y`Yb `5VgWġb]hhYb `U`Yf`F ci hYb  
c\bY`ZfYa XY`<]`ZY`ni `\_'YhhYfb"

8 ]Y `NU\`Yb `VUg]YfYb `Ui Z`XYb `[ Øbgh][ ghYb ` `a Y]gh`gWġbY`ghYb `  
F ci hYb `Ui Z`XYb `6Yf[ " `K ]Y `cVYb `g]bX`X]Y `NU\`Yb `c\bY` : `i [ \_cghYbž  
5i gfØghi b [ `i bX`ni gĀh`n]WġY `HfU]b]b [ gdfc [ fUa `a Y"

< ]bk Y]g. `K ]f`Ya dZY\`Yb `X]YgY `C dh]cb `B ⇒ < H`i bX`bY\`a Yb `g]Y `bi f  
XYf`J c`ghĀbX][ \_Y]h`U`VYf`Ui Z`

? ]`ja UbXgWġ Ufc	%"\$\$\$\$
9`Vfi g	%") &\$

5Wc bWU[ i U	( "\$\$\$
8YbU`]	, " ) \$\$
Di bWU_ `>JmU	+ " ) \$\$
J ]bgcb	( "\$\$\$\$
9j YfYgh	' ) "\$\$\$\$
; YgUa h	- + " ) &\$

`U`h1 2

@Y]hV]`X: `J ]l ]h#G\i hhYfgbcW\_

.

8YhU]`g

6Ygi WX Yb `G]Y `i bg `Ui Z. `Y]bY!fY]gY"XY