

J YfVcf[ YbY 'GWX ÀhnY. 'A UfnU\ b!  
< Y``YfgXcfZ'ZØf' bYi [ ]Yf][ Y '9bhXYW\_Yf

9bhXYW\_Yb'G]Y'X]Y '[ fØbYb' C UgYb' i bX' \_i `hi fY``Yb' < ][ \ `][ \ hg  
j cb 'A UfnU\ b! < Y``YfgXcfZ' J cb' ZUa ] ]YbZfYi bX' ]WX Yb  
5\_hj] ]hÀhYb' V]g'ni f' 5fWX ]hY \_hi f' `Yf' YVYb' G]Y' XYb' 6Yn]f\_°



K ]`\_ca a Yb' ]b' A UfnU\ b! < Y``YfgXcfZ' Y]bYa `XcddY`hYb' 6Yn]f\_ ]a  
BcfXcghYb' 6Yf' ]bgž' XYf' a Y\ f' ni `V]YhYb' \ Uhž' U'g' j ]Y' Y' Ui ZXYb  
YfghYb' 6` ]W\_ j Yfa i hYb' k ØfXYb" K À\ fYbX' a Ub' cZh' Ub' X]Y  
D'UhYbVUi hYb' XYb\_ hž' X]Y' X]YgY'; Y[ YbX' dfÀ[ Ybž' [ ]Vh' Yg' \ ]Yf' Ui WX  
Y]bY' ØVYffUgWX YbXY': Ø`Y' Ub' [ fØbYb' C UgYbž' \_i `hi fY``Yb' GWX ÀhnYb  
i bX' ZUa ] ]YbZfYi bX' ]WX Yb' 5\_hj] ]hÀhYb' " ð' i bgYfYa ` \ Yi h][ Yb  
5fh]\_Y` bY\ a Yb' k ]f' X]WX' a ]h' Ui ZY]bY' gdUbbYbXY' FY]gY' Xi fWX  
A UfnU\ b! < Y``YfgXcfZi bX' nY][ Yb' X]fž' k Ug' X]YgYb' 6Yn]f\_  
VYgcbXYfg' a UWXh"

J cb' k Y]h' Ai Z][ Yb' DUf\_g' V]g' \ ]b' ni `ZUgn]b]YfYbXYb'; U`Yf]Ybž' j cb  
\_i ` ]bUf]gWX Yb' 9bhXYW\_i b[ gfY]gYb' V]g' \ ]b' ni `hfUX]h]cbgfY]WX Yb  
5gdY\_hYb' XYf' 6Yf' ]bYf'; YgWX ]WX hY' `A UfnU\ b! < Y``YfgXcfZ' \ Uh' ZØf  
YXYb' Yhk Ug' ni `V]YhYb' " 9[ U' ž' cV' Xi `Y]b' 6Yf' ]bYf' V]ghž' XYf' gY]bY

<Y]a Uh'bi 'YbhXYW\_Yb'a ÒW hYž'cXYf'Y]b'F Y]gYbXYfž'XYf'Ui Z'XYf  
Gi WXY'bUW'j YfghYW\_hYb'ž k Y'Yb']ghž'Ugg'X]W'j]bgd]f]YfYb'i bX  
YbhXYW\_Y'a ]hi bg'X]Y'j ]Y'Yb': UW'hhYb'X]YgYg'Y]bn][ Ufh][ Yb  
6Yn]f\_g" A UW'X]W'VYfY]h'ZØf'Y]b'5VYbhYi Yf'j c''Yf  
, VYffUgW'i b[ Yb'

9bhXYW\_i b[ 'XYf'[ fØbYb'C UgYb']b'A UfnU\ b!  
< Y''YfgXcfZ

A UfnU\ b!< Y''YfgXcfZ'Y]b'6Yn]f\_'a 'Ògh]WXYb'6Yf']bž']gh'b]W'h'bi f  
ZØf'gY]bY'D'UhhYbVUi UfW.]hY\_hi f'VY\_Ubbhž'gcbXYfb'Ui W'ZØf'gY]bY  
ØVYffUgWXYbX'nU\ 'fY]WXYb'[ fØbYb'C UgYb'"8]YgY'fi \][ Yb  
F ØW\_ni [ gcfh'V]YhYb'Y]bY'dYfZY\_hY'A Ò[ 'W\_Y]hž'XYa 'ghÅXh]gWXYb  
Hfi VY'ni 'Ybh\_ca a Yb'i bX'X]Y'BUhi f'j]b'j c''Yb'NØ[ Yb'ni  
[ Yb]Y» Yb'"9[ U'ž'cV'G]Y'Y]b'VY[ Y]ghYfhYf'GdUn]Yf[ Åb[ Yf'cXYf  
Y]bZUW'bi f'Ui Z'XYf'Gi WXY'bUW'Y]bYa 'gW'ØbYb'D'ÅhnWXYb'ni a  
9bhgdUbbYb'g]bX' \]Yf'Z]bXYb'G]Y'nU\ 'fY]WXY'A Ò[ 'W\_Y]hYb"

9]b'VYgcbXYfg'\YfUi gfU[ YbXYg'6Y]gd]Y''ZØf'X]Y'[ fØbYb': 'ÅWXYb']b  
A UfnU\ b!< Y''YfgXcfZ']gh'XYf'9f\ c' i b[ gdUf\_'A UfnU\ b'"9f  
YfghfYW\_h'g]W'ØVYf'%'\$< Y\_hUf'i bX' ]gh'gck c\ 'VY]'9]b\Y]a ]gWXYb  
U'g'Ui W'VY]'Hci f]ghYb'gY\ f'VY']YVh'"8Yf'DUf\_'V]YhYh'Y]bY  
VYY]bXfi W\_YbXY'J ]Y'nU\ 'Ub'DZUbnybUfhYb'i bX'h\Ya Uh]gWXYb  
; ÅfhYbž'XUfi bhYf'Y]bYb'Ug]Uh]gWXYb'; UfhYbž'XYf'a ]h'gY]bYb  
VYfi \][ YbXYb'K UggYf!9'Ya YbhYb'i bX'XY\_c fUh]j Yb'GhY]b[ ÅfhYb  
ni a 'J Yfk Y]Yb'Y]b'ÅXh"

8Yf'DUf\_' ]gh'b]W'h'bi f'Y]b'C fh'XYf'9f\ c' i b[ ž'gcbXYfb'Ui W'Y]b  
NYbhfi a 'ZØf'j YfgW]YXYbY'J YfUbgH'hi b[ Yb'i bX'\_i 'hi fY''Y  
<][ \][ \hg"< ]Yf'Z]bXYb'XUg'[ Ubny'ž\ f'ØVYf': YghY'i bX'A Åf\_hY  
ghUhž'X]Y'X]Y'J ]Y'gY]h[ \_Y]h'XYf'BUhi f'i bX'X]Y'?i 'hi f'XYg'6Yn]f\_g  
ZY]Yfb'"8]Y'DUj ]'c'bg']a 'DUf\_'g]bX'dYfZY\_h'ZØf'Y]b'D]W\_b]W'a ]h  
: fYi bXYb'cXYf'XYf': Ua ]'Y' 'Vf]b[ Yb'G]Y'Y]bZUW'Y]bY'8YW\_Y'i bX  
⇒ fY '@]YV`]b[ ggbUW\_g'a ]h'

9]b'k Y]hYfYf'[ fØbYf'< c hgd c h']gh'XYf'6c hUb]gWXY'; UfhYb']b  
< Y''YfgXcfZ'"8]YgYf'; UfhYb']gh'b]W'h'bi f'Y]b'C fh'ZØf'X]Y''c\_U'Y  
DZUbnybj ]Y'ZU'hž'gcbXYfb'Ui W'Y]b'C fh'ž'i a 'X]Y'BUhi f'\Ui hbU\ ni

Yf`YVYb" < ]Yf`\_ÖbbYb`6Ygi WXYf`j YfgW]YXYbY`DZUbnybgcfhYb  
\_YbbYb`YfbYb`i bX`Ub`[ YZØ\fhYb`Hci fYb`hY]`bY\ a Ybž`i a`a Y\ f  
ØVYf`X]Y`6YXYi hi b[ `j cb`6]cX]j Yfg]hÅhi bX`BUhi fgW]i hn`ni  
YfZU\ fYb" : Øf`6]`Xi b[ gfY]gYbXY`i bX`BUhi f`]YV\ UVYf`]gh`X]YgYf  
; UfhYb`Y]b`UVgc`i hYg`A i gg"

K Ybb`G]Y`Yhk Ug`a Y\ f`6Yk Y[ i b[ `gi WXYbž`gc`hYb`G]Y`XYb  
Fi ]bYbWJa d`ja`gU[ Ybi a k cVYbYb`6]YgXcfZ`DUf`\_VYgi WXYb"  
8]YgY`\]ghcf]gW]Y`GhÅhY`\_ca V]b]Yfh`BUhi f`a`]h`ZUgn]b]YfYbXYf  
; YgW]W]hY" `GdUn]Yf[ `Àb[ Y`Xi fW]`X]Y`k Y]h`Åi Z][ Yb`; fØbUb`U[ Yb  
V]YhYb`ni gÅhn`]W]ni`XYb`Fi ]bYb`XYg`U`hYb`GW]`cggYg`Y]bYb  
UhYa VYfUi VYbXYb`6`]W`Ui Z`X]Y`i a [ YVYbXYb`@UbXgW]UZhYb" `8Yf  
DUf`\_k ]fX`j cb`j ]Y`Yb`F UXZU\ fYfb`i bX`K UbXYfYfb`VYgi W]hž`X]Y`X]Y  
[ i h`Ub[ Y`Y[ hYb`K Y[ Y`[ Yb]Y» Yb"

⇒a`Gca a Yf`\_Ubb`X]Y`[ fØbYb`C UgYb`j cb`A UfnU\ b! < Y`YfgXcfZ  
Ui W]`U`g`J YfUbghU`hi b[ gcfh`ZØf`j YfgW]YXYbghY`Ci hXccf!  
5\_h]j ]hÅhYb`[ Ybi hnh`k YfXYb" `8]Y`GhUXh`cf[ Ub]g]Yfh`fY[ Y`a `Å» ][  
: fY]`i Zh\_cbnYfhYž` : ]a UVYbXY`i bX`A Uf`hZYghYž`X]Y`XYb  
; Ya Y]bgW]UZh]g[ Y]gh`ZØfXYfb`i bX`[ `Y]W]nY]h][ `X]Y`k i bXYfgW]ØbY  
I a [ YVi b[ `] Yb]Y» Yb`UggYb" `8]YgY`J YfUbghU`hi b[ Yb`V]YhYb`Y]bY  
VYXYi hYbXY; Y`Y[ Yb\Y]hž`UbXYfY`5bk c\ bYf`ni`hfYZZYb`i bX`g]W]  
a ]h`XYf`c`\_U`j YfUb`\_YfhYb`; Ya Y]bgW]UZh`ni`j YfV]bXYb"

< ]Yf`g]bX`Y]b][ Y`XYf`VYghYb`; fØbZ`ÅW]Ybž`X]Y`G]Y`]b`A UfnU\ b!  
< Y`YfgXcfZYb`hXYW`Yb`\_ÖbbYb.

- 9f\c`i b[ gdUf`\_A UfnU\ b` `⇒XYU`ZØf`Y]bYb`Yb`hgdUb`bhYb  
GdUn]Yf[ Ub[ `cXYf`Y]b`D]W\_b]W`"
- 6chUb]gW]Yf`; UfhYb`< Y`YfgXcfZ` `9]b`C fh`XYf`6]`Xi b[ `i bX  
XYf`GW]Øb\Y]h`XYf`BUhi f"
- 6]YgXcfZYf`DUf`\_`?ca V]b]Yfh`\]ghcf]gW]Y`GhÅhYb`a`]h  
k Y]hYbž`[ fØbYb` : `ÅW]Yb"
- DUf`\_Ua` ; `Y]gXfY]YW`\_` `9]b`fi` \][ Yf`F ØW`ni [ gcfh`ZØf  
GdUn]Yf[ `Àb[ Y`Ua` `K UggYf"
- K ]`\Ya`!j cb!G]Ya Ybg`DUf`\_` : Ø\`Yb`G]Y`X]Y`BUhi f`]b`XYf  
A ]hY`XYf`GhUXh"

9]b`<][ \`][ \hZØf`j ]Y`Y`6Ygi WXYf`g]bX`X]Y` ; ÅfhYb`XYf`K Y`h`8 ]YgYf`  
]bhYf`\_i`hi fY``Y` ; UfhYb`j YfUbgWU`i`]W`h`X]Y`XYi hgWXY` ; UfhYb`\_i bgh`  
gck ]Y` ; ÅfhYb`Ui g`j YfgW`]YXYbYb`@ÅbXYfb`XYf`K Y`h`< ]Yf`Z]bXYb`  
G]Y`cf]YbhU`]gWXYž`Ug]Uh]gWXY`i bX`Yi fcdÅ]gWXY` ; ÅfhYbž`X]Y`U`Y`  
i bhYfgW`]YX`]W`Y`V`chUb]gWXY`Gh]Y`i bX`@UbXgWU]b[\_cbnYdhY`  
UbV]YhYb`"6YgcbXYfg`VYY]bXfi W\_YbX`g]bX`X]Y`W`]bYg]gWXYb`i bX`  
UdUb]gWXYb` ; ÅfhYbž`X]Y`gck c`Xi fW`]\fY`Ghfi \_hi f`U`g`Ui W`  
Xi fW`]\fY` : `cfU`ni f`9f`c`i b[ `i bX`A YX]hUh]cb`Y]b`UXYb`"

D`UbYb`G]Y`ÅfYb`6Ygi W`]b`A UfnU`b!<Y``YfgXcfZi bX`[\_`ÖbbYb`G]Y`  
g]W`X]Y` ; Y`Y`[ Yb`Y]hž`X]YgY`[ fØbYb`C UgYb`ni`[ Yb]Y»Yb`8 ]Y`  
j YfgW`]YXYbYb`DUf`\_g`i bX` ; ÅfhYb`g]bX`[\_`Ubñ`Å`f][ `ni [\_`Åb[\_`]W`i bX`  
V]YhYb`XUg`[\_`UbñY`»\f`ØVYf`i bhYfgW`]YX`]W`Y`5bg]W`hYbž`  
5\_h]j ]hÅhYb`i bX`J YfUbgU`hi b[ Yb`"»Zcfa Uh]cbYb`ni f`  
9ffY]W`VUf`\_Y]hi bX`ni`VYgcbXYfYb`9j Ybhg`Z]bXYb`G]Y`Ui ZXYf`  
cZ]n]Y`Yb`K YVgY]hY`XYf`GhUXh`6Yf`]b`i bhYf`k k k "VYf`]b"XY`"

? i`hi`f`i`bX`HfUX]h]cbYb.`9]b`6`]W`\_]b`X]Y`  
; YgW`]W`hY`XYg`6Yn]f`\_g`

A UfnU`b!<Y``YfgXcfZž`Y]b`6Yn]f`\_]a`C ghYb`6Yf`]bgž`\Uh`Y]bY`  
ZUgn]b]YfYbXY` ; YgW`]W`hYž`X]Y`fY]W`Ub`\_i`hi fY``Yb`9]bZØggYb`i bX`  
HfUX]h]cbYb`]gh`8 ]YgYf`6Yn]f`ž`XYf`cZi`U`g`Y]bY`XYf`[ fØbghYb`  
C UgYb`XYf`<Ui dhghUXh`Ub[ YgY`Yb`k ]fXž`Yfn`Å`h`Ui W`X]Y`  
; YgW`]W`hYb`j cb`A YbgW`Ybž`X]Y`\]Yf`YVYbž`i bX`j cb`XYb`  
9fY][ b]ggYbž`X]Y`X]Y`F Y[ ]cb[\_`YZcfa`h`\UVYb`8 ]Y`9bhk ]W`\_i b[\_`XYg`  
6Yn]f`\_g`gd]Y[ Y`h`XYb`K UbXY`6Yf`]bg`]a`@Ui ZY`XYf`»\fY`k ]XYf`"

<]ghc]f]gW`[\_`YgY`Yb`YbhghUbX`A UfnU`b`]b`XYb`%`"»\f`i bXYfh`U`g`  
`ÅbX`]W`Yg` ; YV]Yh`8i fW`X]Y`»\f`i bXYfh`VY`]Y`h`XYf`6Yn]f`\_`  
gY]bY`ÅbX`]W`Yb`K i fnY`b`VY]ž`V]g`Yf`]b`XYf`nk Y]hYb`<`Å`ZhY`XYg`&\$`  
»\f`i bXYfhg`i fVUb]g]Yfh`k i fXY`8 Ug`5i ZYfghY`Yb`j cb`  
K c`b]g]YX`i b[ Ybž`]bgVYgcbXYfY`X]Y`VY`Ub`bhYb`D`UhYbVUi hYbž`  
dfÅ[ hY`X]Y`GhUXh`UbXgW`UZh`i bX`VfUW`hY`Y]bY`bYi Y`gcn]U`Y`  
8 mbUa ]\_`a`]h]g]W`"8 Ug`gW`bY`Y`K UW`ghi a`ZØ`fhY`YXcW`Ui W`ni`  
<YfUi gZcfXYfi b[ Ybž`X]Y`X]Y` ; Ya Y]bgW`UZhYb`\Yi hY`bcW`  
VYgW`ÅZh][ Yb`"

- 8]Y`G]YX`i b[ gYbhk ]W`i b[ .`B UWX`XYa`Nk Y]hYb  
K Y`h\_f]Y[ `VY[ Ubb`XYf`a UggYb`UZhY`6Ui`j cb  
D`UhhYbVUi hYbž`i a`XYb`K c`b fUi a a Ub[ Y`]b`XYf`88F`ni  
VY`YVYb`"8]YgYg`6Ui dfc`Y`\_h`gW`i ZY]bY`bYi Y`X`Ybh]h`Ah`Z0f  
XYb`6Yn]f`\_i bX`]gh`V]g`\\Yi hY`Y]b`df`A[ YbXYg`9`Ya Ybh"
- ðhY[ fUh]cb`j`cb`HfUX]h]cbYb.`Hfchn`XYf`i fVUbYb  
9bhk ]W`i b[ `V`]YVYb`X]Y`HfUX]h]cbYb`XYf`]`b`i a [ YVYbXYb  
8`0fZYf`YVYbX][ "": YghYž`6f`Ai WX`Y`i bX`c`\_U`Y  
J YfUbghU`hi b[ Yb`hfU[ Yb`ni f`DZY[ Y`XYg`\_i`hi fY`Yb`9fVYg  
VY]"
- @UbXgW`UZhg!`i`bX`B Uhi fgW`i hn.`8]Y`j ]Y`Yb  
; f0bZ`A`W`Yb`]b`A UfnU`b!<Y`YfgXcfZ`k ]Y`XYf`VYf0`a hY  
9f`c`i b[ gdUf`\_Fi Xck Yf`<0`Yž`nYi [ Yb`j`cb`XYf  
6Ya 0`i b[ žX]Y`B Uhi f`]b`X]Y`gh`A`Xh]gW`Y`i a [ YVi b[ `ni  
]bhY[ f]YfYb"

8]Y`?i`hi`f`]b`A UfnU`b!<Y`YfgXcfZ]gh`b]W`h`bi`f`Xi`fW`X]Y  
5fW`]hY`\_hi`f`[ Ydf`A[ hž`gcbXYfb`Ui`W`X`i`fW`X]Y`j`]Y`Yb`\_i`hi`fY`Yb  
J YfUbghU`hi b[ Yb`i`bX`; Ya`Y]bgW`UZhg]b]h]Uh]j`Ybž`X]Y`]b`XYf`F`Y[ ]cb  
ghUhhZ]bXYb`"J`cb`hfUX]h]cbY`Yb`i`YghYb`V]g`\\]b`ni`a`cXYfbYb`HUbni  
i`bX`?i`bg]j`YfUbghU`hi b[ Yb`V]YhYh`XYf`6Yn]f`\_Y]b`j`]Y`Z`A`h][ Yg  
\_i`hi`fY`Yg`9f`YVb]g"

9]b`<][ \`][ \h]gh`XUg`U`A`f`]W`Y`A UfnU`b!<Y`YfgXcfZYf  
?i`hi`fZYghž`XUg`c`\_U`Y`?0bgh`Yf`i`bX`<UbXk`Yf`\_Yf  
ni`gUa`a`YbVf]b[ h`<]Yf`k`]fX`X]Y`a`i`h]\_i`hi`fY`Y`J`]Y`ZU`h`XYg  
6Yn]f`\_g[ YZY]Yfhž`a`]h`A`i`g]\_ž`HUbni`bX`\_i`]bUf]gW`Yb  
?0gh]W`\_Y]hYb`Ui`g`U`Yf`K`Y`h`Gc`W`Y`J`YfUbghU`hi b[ Yb`gh`A`f`\_Yb  
XUg`; Ya`Y]bgW`UZhg[ YZ0`\\i`bX`Z0fXYfb`XYb`5i`ghUi`gW`nk`]gW`Yb  
XYb`j`YfgW`]YXYbYb`?i`hi`fYb"

J YfUbghU`hi b[	8 Uhi a	C fh
A UfnU`b! <Y`YfgXcfZYf ?i`hi`fZYgh	ž`b]	9f`c`i`b[`gdUf`_ A UfnU`b
K Y]\`bUW`hga`Uf`_h A UfnU`b	8 YnYa`VYf	A Uf`_hd`Uhn <Y`YfgXcfZ
C dYb!5]f!]?]bc	Gca`a`Yfa`cbUHY	: fY]`i`Zh_]bc`]a`DUf`_

8]Y[ Ughfc bca ]gWXY`GnYbY`]b`A UfnU\b!<Y`YfgXcfZ]gh`Y]b  
k Y]hYfYg`6Y]gd]Y`XUZØfž`k ]Y`X]Y`?i`hi`fYb`ni`gUa`a`Yb`\_ca`a`Yb`  
<]Yf`Z]bXYb`g]WXY`FYghUi`fUbhgž`X]Y`gck`c`\`c`\_U`Y`U`g`Ui`W  
]bhYfbUh]cbU`Y`?ØWXY`UbV]YhYb`"J]Y`Y`@c`\_U`Y`g]bX  
: Ua` ]`Y]bVYhf]YVYž`X]Y`HfUX]h]cbYb`i`bX`FYnYdhY`Ui`g`]\fYb  
<Yf`\_i`bZh`ÀbXYfb`k`Y]hYf[`YVYb`"Gc`hf]Zh`a`Ub`]b`Y]bYa``\_`Y]bYb  
7UZ`À`a`Ò[`]WXYfk`Y]gY`Ui`Z;`Yf]WXYhY`Ui`g`XYa``6U`\_Ubž`k`À`fYbX`Y]b  
FYghUi`fUbh`]hU`]Yb]gWXY`GdYn]U`]h`hYb`gYfj`]Yfh"

8]Y`\]ghcf]gWXY`6YXYi`hi`b[`]XYf`FY[`]cb`k`]fX`Ui`WXY`]b`XYb  
nU`\fY]WXYb`A`i`gYYb`i`bX`;`YXYb`\_gh`hYb`g]WXYhVUfž`X]Y`g]WXY`a`]h`XYf  
;`YgWXY]WXYhY`6Yf`]bg`i`bX`XYf`88F`Ui`gY]bUbXYfgYhYb`"6YgcbXYfg  
XUg`88F`A`i`gYi`a``]b`A`UfnU\b`V]YhYh`]bhYfU`\_h]j`Y`5i`gghY`i`b[`]Ybž  
X]Y`Yg`XYb`6Ygi`WXYfb`Yfa`Ò[`]WXYbž`]b`X]Y`@YVYbgfYU`]h`hXYf  
A`YbgWXYb`k`À`fYbX`XYf`HY`]i`b[`]8Yi`hgWXY`UbXg`Y]bni`hUi`WXYb`"8]Y  
JYfVcf[`]YbY`FYU`]h`hXYg`5`hU[`]gž`X]Y`<YfUi`gZcfXYfi`b[`]Yb`i`bX`X]Y  
\_`Y]bYb`:`fYi`XYb`XYg`@YVYbg`k`YfXYb`\]Yf`YVYbX][`"

Ni`g`h`h`WXY`gd]Y`Yb`GWXY`Yb`i`bX`\_i`hi`fY`Y`fgh]hi`h]cbYb`Y]bY  
k`]WXYh[`]Y`F`c`Y`]b`XYf`J`Yfa`]h`i`b[`]j`cb`K`]ggYb`ØVYf`X]Y  
;`YgWXY]WXYhY`i`bX`HfUX]h]cbYb`XYg`6Yn]f`\_g`"K`cf`\_g`l`cdgž`J`cfhf`À[`]Y  
i`bX`5i`gghY`i`b[`]Yb`k`YfXYb`fY[`]Y`a`À»][`]Ub[`]YVchYbž`i`a`XUg  
6Yk`i`gghgY]b`ZØf`X]Y`c`\_U`Y`?i`hi`f`ni`ZØfXYfb"

fg[`YgUa`h`gd]Y[`]Y`h`A`UfnU\b!<Y`YfgXcfZ`Y]bY`Y]bn][`Ufh][`Y  
A`]gWXY`i`b[`]Ui`g`HfUX]h]cb`i`bX`A`cXYfbY`k`]XYf`"8Yf`6Yn]f`\_]gh`Y]b  
C`fhž`Ub`XYa``X]Y`J`Yf[`]Ub[`]Yb`Y]h]g]WXYhVUf`V`Y]Vhž`k`À`fYbX`X]Y  
A`YbgWXYb`]b`X]Y`Ni`\_i`b`Zh`V`]W`Yb`"9]b`6Ygi`WXY`]b`X]YgYf  
ZUW`hYb`fY]WXYb`;`Y[`]YbX`6Yf`]bg`]gh`b]WXYh`bi`f`Y]bY`FY]gY`Xi`fW  
X]Y`NY]hž`gcbXYfb`Ui`WXY`Y]bY`9b`hXYW`\_i`b[`]XYf`\Yfn`]WXYb  
;`Ya`Y]bgWXYUZhž`X]Y`\]Yf`YVhi`bX`X]Y`]fY`HfUX]h]cbYb`Ui`Z  
j`]Y`Z`h[`]Y`K`Y]gY`ZY]Yfh"

: Ua` ]`Y]bZfYi`bX`]WXY`5`\_h]j`]h`hYb`. `GdU»`ZØf  
;`fc»`i`bX`?`Y]b

A`UfnU\b!<Y`YfgXcfZ`\Uh]g]WXY`U`g`Y]b`\Yfj`c`ffU[`]YbXYg`N]Y`ZØf  
: Ua` ]`Y]b`a`]h?`]bXYfb`YhUV`]Yfh`"8Yf`6Yn]f`\_`V]YhYh`Y]bY`J]Y`nU`\`

j cb'5\_hj]hÅhYbž'X]Y'gck c\`i bhYf\U`hgUa`U`g`Ui W\`Y\ffY]W`g]bX"  
 <]Yf'g]bX`Y]b][`Y`XYf`VYghYb`A Ò[ `]W\_X]hYbž'i a`Y]bYb`gdUbbYbXYb  
 HU[ `a`]h`XYf`[`UbnYb`:`Ua``]Y`ni`j`YfVf]b[`Yb.

- `;`ÅfhYb`XYf`K`Y`h.`8]YgY`VYY]bXfi`W\_YbXY  
 ;`UfhYb`UbXgW`UZh`]gh`Y]b`Y`W`hY`g`<][`\`][`\h`ZØf`:`Ua``]Yb"  
 <]Yf`\_ØbbYb`?]bXYf`X]Y`j`YfgW`]YXYbYb`H\Ya`Yb[`ÅfhYb  
 Yf\_i`bXYbž`XUfi`bhYf`Ug]Uh]gW`Yž`]hU`]Yb]gW`Y`i`bX  
 Yi`fcdÅ]gW`Y`;`ÅfhYb`"6Ygc`bXYfg`gW`Øb`]gh`XYf`6Ygi`W`]a  
 Gca`a`Yfž`k`Ybb`X]Y`6`i`a`Yb`]b`j`c`Yf`6`ØhY`ghY`Yb"
- `;`9N`6Yf`]b.`8Ug`:`fY]nY]h`i`bX`9f`c`i`b[`gnYbhf`i`a`]gh`Y]b  
 DUfUX]Yg`ZØf`?]bXYf`i`bhYfgW`]YX`]W`Yb`5`hYfg`"CV  
 9l`dYf]a`Ybh]YfYb`]a`:`cfgW`Yf\`Ui`g`cXYf`\_fYUh]j`Y  
 K`cf\_g`c`dg`i`\]Yf`\_ØbbYb`?]bXYf`gd]Y`YbX`YfbYb`i`bX`]\fY  
 HU`YbhY`YbhXYW\_Yb"
- `H]YfdUf`\_`6Yf`]b.`CVk`c\`Yf`b]W`h`X]fY`\_h`]b`A`UfnU`b!  
 <Y`YfgXcfZ`]Y[`hž`]gh`XYf`H]YfdUf`\_`Y]W`h`ni`Y`ffY]W`Yb`"8Yf  
 k`Y]h`Åi`Z][`Y`DUf`\_`V]YhYh`X]Y`A`Ò[ `]W\_X]hž`nU`\`fY]W`Y  
 H]YfUfhYb`]b`bUhi`fbU`Yb`;`Y\Y[`Yb`ni`VYcVUW`hYb`i`bX`]gh  
 Y]bY`[`fc»`Ufh][`Y`6`]Xi`b[`gU`\_h]cb`ZØf`X]Y`[`UbnY`:`Ua``]Y"
- `;`fY]nY]hUb[`YVchY`]a`DUf`\_.`8]Y`nU`\`fY]W`Yb  
 Gd]Y`d`ÅhY`i`bX`GdcfhUb`U[`Yb`]b`XYb`K`c`\b[`YV]YhYb  
 V]YhYb`j`]Y`F`Ui`a`ZØf`Gd]Y`i`bX`Gdcfh`"CV`H]gW`hYbb]gž  
 G\_UhYVcUfXZU`fYb`cXYf`Y]bZUW``bi`f`Y]b`D]W\_b]W`\_]a  
 ;`fØbYb`i`Yg`[`]Vh`ZØf`YXYb`Yhk`Ug`ni`YbhXYW\_Yb"
- `GW`k`]a`a`VÅXYf.`9]b`6Ygi`W`]a`:`fY]nY]hVUX`A`UmU  
 A`UfY`]gh`VY`]:`Ua``]Yb`gY`f`VY`]YVh`"<]Yf`[`]Vh`Yg`b]W`h`bi`f  
 GW`k`]a`a`VYW\_Ybž`gcbXYfb`Ui`W`F`i`hgW`Yb`i`bX`K`Y`b`Ygg!  
 5b[`YVchYž`X]Y`Y]bYb`HU[ `]a`K`UggYf`i`bj`Yf[`Ygg`]W`  
 a`UW`Yb"

B`VYb`X]YgYb`5hhfU`\_h]cbYb`Z]bXYb`fY[`Y`a`Å»][`j`YfgW`]YXYbY  
 J`YfUbghU`hi`b[`Yb`i`bX`:`Ygh]j`U`g`]b`A`UfnU`b!<Y`YfgXcfZ`ghU`hž`X]Y  
 gdYn]Y`Ui`Z:`Ua``]Yb`Ui`g[`Yf]W`hYh`g]bX`"8]YgY`:`Ygh]j`U`g`V]YhYb  
 cZh

J`YfUbghU`hi`b[	6YgW`fY]Vi`b[	K`Ubb
:`Ua``]YbZYgh]a	HU[ `j`c`Yf`Gd]Yž	đ`b]`YXYb`đ\`fYg

J YfUbgH`hi b[ @UbXgW UZhgdUf_	6YgWfY]Vi b[ GdU» i bX I bhYf\U`hi b[ `a ]h j YfgW ]YXYbYb GhÅbXYb`i bX 5hhfU_h]cbYb"	K Ubb
K Y]\bUW hga Uf_h	? fYU]j Y`GhÅbXYž @YW_YfY]Yb`i bX`Y]b ? ]bXYfdfc[ fUa a ž XUg`X]Y`5Xj YbhgnY]h ni a `9f`YVb]g`a UW`h"	8YnYa VYf`YXYb »\fYg
?i`hi fZYgh	9]b`A ]l`Ui g`A i g]_ž HUbni bX _i`]bUf]gWYb ? Ògh`]W_Y]hYb`Ui g j YfgW ]YXYbYb ?i`hi fYb"	GYdhYa VYf`YXYb »\fYg

9]b`5i gZi [ `]b`A UfnU\!<Y`YfgXcfZ`\_Ubb`UVYf`Ui W`]b` : cfa `j cb  
BUhi fYf\_i bXi b[ Yb`[ YghU`hYh`k YfXYb`"8]Y`[ fc»nØ[ ]Yb  
; fØbZÅWYb`i bX`DUF\_g`k ]Y`XYf`9f\`c`i b[ gdUf\_`A UfnU\`b`g]bX  
dYfZY\_h`ZØf` : Ua `]YbUi gZØ[ Y`"J cb`Ui g[ YXY\bhYb`GdUn]Yf[ Åb[ Yb  
ØVYf`XUg`Gd]Y`Yb`]a ` : fY]Yb`V]g`\]b`ni`GdcfhU\_h]j ]hÅhYb`]gh`ZØf  
YXYb`Yhk Ug`XUVY]"`9fk Y]WYb`G]Y`X]Y`<YfnYb`ÀfYf`?]bXYf`a ]h`

- D]W\_b]W\_`]a`DUF\_` : 6f]b[ Yb`G]Y`Y]bY`8YW\_Y`i bX`GbUW\_g  
a ]h`i bX`j Yfvf]b[ Yb`G]Y`Y]bYb`YbhgdUbbhYb`HU[ `]b`XYf  
BUhi f"
- : U\ffUXhci fYb.`A ]YhYb`G]Y` : U\ffÅXYf`cXYf`bi hnYb`G]Y  
ÀfY`Y][ YbYbž`i a`X]Y`I a [ YVi b[ `ni`Yf\_i bXYb"
- K UggYfgdcfhU\_h]j ]hÅhYb.` ð`XYb`bU\Y`[ Y`Y[ YbYb  
; Yk ÅggYfb`\_ØbbYb`G]Y`?Ubi ZU\Yb`cXYf`Y]bZUW`Ua`I ZYf  
YbhgdUbbYb"

9]b`k Y]hYfYg`hc`Yg`N]Y`]b`A UfnU\!<Y`YfgXcfZ`]gh`XUg` : 9N`6Yf`]b  
žXUg`[ fØ»hY` : fY]nY]h`i bX`9f\`c`i b[ gnYbhfi a`ZØf`?]bXYf`]b  
8Yi hgW`UbX`" <]Yf`\_ØbbYb`\_Y]bY`6Ygi WYf`j YfgW ]YXYbY  
K cf\_g\cdg`VYgi WYbž`Ub`gdUbbYbXYb`9I dYf]a YbhYb`hY]bY\`a Yb

i bX`g]W` ]b`XYf`B Uhi f`Ui ghcVYb"8 Ug: 9N`V]YhYh`cZh`k YW`gY`bXY  
Dfc[ fUa a`Y`i bX`9j Ybhgž`X]Y`gdYn]Y`Ui ZX]Y`6YXØfZb]ggY`j cb  
: Ua` ]`Yb`ni [ YgW`b]hYb`g]bX"

5VgW` ]Y» YbX`Ägg`g]W` ]gU[ Ybž`XUgg`A UfnU`b! <Y`YfgXcfZY]b  
k U`fYg`9`XcfUXc`ZØf: Ua` ]`Yb` ]gh"8 ]Y`J ]Y`nU`XYf`5\_hj] ]h`hYbž`X]Y  
gck c`6]`Xi b[ `U`g`Ui W` ]GdU» `V]YhYbž`a UW`Yb`XYb`6Yn]f`\_ni  
Y]bYa` ]XYU`Yb`N]Y`ZØf`Y]bYb`i bj Yf[ Ygg`]W`Yb: Ua` ]`YbUi gZi [ " `b  
XYf`?ca`V]bUh]cb`Ui g`BUhi fž`6]`Xi b[ `i bX`5\_hj] ]h`h`k ]fX`ZØf`YXYb  
Yhk Ug[ YVchYb` ] [ Ubn[ `Y]W`ž`cV`hU[ Y`Ub[ Yf`GdU» `cXYf`Y]b  
\_i fnYg`K`cW`YbYbXY` [ Yd`Ubh`]gh"

? i `]bUf]gW`Y`< YfUi gZcfXYfi b[ Yb.`8 ]Y  
VYghYb`F YghUi fUbhg`i bX`7UZÅg

A UfnU`b! <Y`YfgXcfZ`Y]b`6Yn]f`\_VY`\_Ubbh`ZØf`gY]bY`j ]Y`Z`h][ Y  
?i`hi`f`i bX`; YgW`]W`hYž`V]YhYh`Ui W` ]Y]bY`VYY]bXfi W`\_YbXY  
[ Ughfcbca` ]gW`Y`GnYbYž`X]Y`gck c`9]b`Y]a` ]gW`Y`U`g`Ui W`  
Hci`f]ghYb`VY[ Y]ghYfh" `C`V`hfUX]h]cbY`Y`XYi hgW`Y`?ØW`Y`ž`Ug]Uh]gW`Y  
GdYn]U`]h`hYb`cXYf`]bhYfbUh]cbU`Y`; Yf]W`hY` ]`Yf[ ]Vh`Yg`ZØf`YXYb  
; YgW`a`UW`\_Yhk`Ug" @UggYb`G]Y`i bg`Y]bYb`6`]W`\_Ui`Z`Y]b][ Y`XYf  
VYghYb`F YghUi fUbhg`i bX`7UZÅg`]b`X]YgYa` ] ]Y`Z`h][ Yb`6Yn]f`\_  
k YfZYb"

9]b`YW`hYf`; Y`Y]a`h]dd`]gh`XUg`F YghUi fUbh`9I ]`ž`XUg`ZØf`gY]bY  
[ Ya`Øh`]W`Y`5ha`cgd`ÅfY`VY`\_Ubbh`]gh" < ]Yf`\_ØbbYb`G]Y`Y]bY  
A ]gW`i b[ `Ui`g`XYi hgW`Yf`i bX`]bhYfbUh]cbU`Yf`?ØW`Y`[ Yb]Y» Yb"  
6YgcbXYfg`VY`YVh`g]bX`X]Y`U`i g[ Ya`UW`hYb`A`Ui`hUgW`Yb`i bX`XUg  
h`[ `]W`Y`k`YW`gY`bXY`A` ]hU[ gUb[ YVchž`XUg`Zf]gW`Y`ž`gU]gcbU`Y  
Ni`hUhYb`bi`hh"8 ]Y`ZfYi bX`]W`Y`6YX]Ybi b[ `i bX`XUg`k`Ufa`Y  
5a`V]YbhY`a`UW`Yb`Yg`ni`Y]bYa` ]XYU`Yb`C`fh`ZØf`Y]b`YbhgdUbbhYg  
9ggYb`a` ]h: fYi bXYb`cXYf`XYf: Ua` ]`Y"

K Ybb`G]Y`Ui`ZXYf`Gi`W`Y`bUW`Yhk`Ug`9I`ch]gW`Ya` ]g]bXž`gc`hYb`G]Y  
XUg`Gi`g`!@UXYb` ]b`6YhfUW`h`n]Y`Yb"8 ]YgYg`\_Y]bYž`UVYf`ZY]bY  
F YghUi fUbh`V]YhYh`Y]bY`J ]Y`nU`XYf`5\_hj] ]h`hYbž`X]Y  
`UdUb]gW`Yb`?Øgh]W`\_Y]hYb"8 ]Y: f]gW`Y`XYf`Ni`hUhYb` ]gh`Yf  
VYa`Yf`\_Ybgk`Yfž`i bX`XUg`DfY]g!@Y]ghi b[ g!J`Yf`Å`hb]g`]gh

i bgW`U[ VUf" 5i » YfXYa` [ ]Vh`Yg`cZh`\_fYUhj` Y`GdYW]U`gž`X]Y`j` cb`XYf`  
»\`fYgnY]h`]bgd]f]Yfh`g]bX" 8]Y`"]YVYj` c`Y`Df`AgYbhUh]cb`XYf` ; Yf]W`hY`  
a` UW`h`YXYg`9ggYb`ni`Y]bYa`VYgcbXYfYb`9f`YVb]g"

: Øf`@]YV\`UVYf`XYf`]hU`]Yb]gW`Yb`? ØW`Y`]gh`XUg`D]nnYf]U`8 U` ; ]bc`  
Y]b`UVgc`i`hYg`A`i`gg" < ]Yf`k`YfXYb`X]Y`D]nnYb`]a` < c`ncZYb`  
[ YVUW`Yb`i`bX`Yf`U`hYb`gc`Y]bYb`VYgcbXYfg`]bhYbg]j`Yb`  
; YgW`a`UW`"J`cb`\_`Ugg]gW`Yf`A`Uf[ \`Yf]hU`V]g`\`]b`ni`\_`fYUhj`Yb`  
6Y`À[ Yb`k`]Y`HfØZY`i`bX`N]Y[ Yb`\_`AgY`\_`X]Y`5i`gk`U`\`\_`Aggh`\_Y]bY`  
K`ØbgW`Y`c`ZZYb" 5i`W`X]Y`DUghU`i`bX`X]Y`\`Ui`g[ Ya`UW`hYb`8YggYfhg`  
g]bX`gY`\`Ya`dZY`\`Ybgk`Yfh" 6Ygi`W`Yb`G]Y`X]YgYg`F`YghUi`fUbhi`bX`  
Yf`YVYb`G]Y`XYb`YW`hYb`]hU`]Yb]gW`Yb` : `U]f`]b`A`UfnU`b!`  
< Y`YfgXcfZ'

K`Ybb`G]Y`Y]bZUW`bi`f`Y]bYb`[ Ya`Øh]W`Yb`D`Uhn`ni`a`J`Yfk`Y]Yb`  
gi`W`Yb`ž`gc`hYb`G]Y`XUg`7UZ`@]W`hYb`VYf[ `Ui`gdfcV]YfYb" 9g`]gh`  
Y]b`k`i`bXYfgW`ØbYg`\_`Y]bYg`7UZ`ž`XUg`ZØf`gY]bY`\_`Øgh]W`Yb`?i`W`Yb`  
i`bX`\`c`W`k`Yfh][ Yb`? UZZYg`VY`\_`Ubbh`]gh" 8]Y`YbhgdUbbhY`  
5ha`cgd`\`ÀfY`\`ÀXh`XUni`Y]bžY]b`6i`W`ni`Y`YgYb`c`XYf`Y]bZUW`bi`f`  
X]Y`NY]h`ni`[ Yb]Y» Yb" DfcV]YfYb`G]Y`i`bVYX]b[ h`X]Y`GW`k`Ufnk`À`XYf`  
? ]fgW`hcfhY`\_`g]Y`]gh`Y]b`YW`hYf`?`Ugg]\_`Yf`°

8Ug`6]Yf[ UfhYb`Ua`K`i`\`Y`hU`]gh`Y]bY`k`Y]hYfY`[ fc» Ufh][ Y`  
Cdh]cbž`]bgVYgcbXYfY`]b`XYb`k`Àfa`YfYb`A`cbUHYb" < ]Yf`\_`ØbbYb`  
G]Y`]a` : fY]Yb`g]hnYb`i`bX`Y]bY`[ fc» Y`5i`gk`U`\`Ub`6]YfgcfhYb`Ui`g`  
XYf`F`Y[ ]cb`[ Yb]Y» Yb" 8Uni`k`YfXYb`XYZh][ Y` ; f]`[ Yf]W`hY`i`bX`  
hfUX]h]cbY`Y`G`bUW`\_`g`k`]Y`6fYnY`b`gYfj`]Yfh" 8Yf`6`]W`\_`Ui`ZX]Y`  
i`a`]Y[ YbXY`BUhi`f`a`UW`h`XUg`9f`YVb]g`i`a`gc`Ub[ YbY`a`Yf"

5VYf`XUg`]gh`bc`W`\_`Ub[ Y`b]W`h`U`Y`g`8Yf`6Yn]f`\_`V]YhYh`ni`XYa`Y]bY`  
F`Y]\`Y`j`cb`]bhYfbUh]cb`U`Y`? ØW`Yb`ž`X]Y`X]Y`\_`i`hi`fY`Y`J`]Y`ZU`h`XYf`  
F`Y[ ]cb`k`]XYfgd]Y[ Y`b" < ]Yf`g]bX`Y]b][ Y`XYf`VYa`Yf`\_`Ybgk`YfhYghYb`  
Cdh]cbYb.

- C f]Yb hU`]gW`Y` ; YbØggY. `a`F`YghUi`fUbh`5`UXX]b`\_`ØbbYb`  
G]Y`\_`Øgh]W`Y` ; Yf]W`hY`\_`Ui`g`XYf`UfUV]gW`Yb`? ØW`Y`  
dfcV]YfYb" A`]h`Y]bYa`VfY]hYb`5b[ YVch`Ub`j`Y[ YhUf]gW`Yb`  
i`bX` : `Y]gW`[ Yf]W`hYb`]gh`ZØf`YXYb`Yhk`Ug`XUVY]"

- ðX]gWXY`5fca Yb.`6Ygi WXyb`G]Y`XUg`BUa UghYžk c ZFYi bX`]WXY`6YX]Ybi b[ `i bX`Ui h\Ybh]gWXY`]bX]gWXY GdY]gYbž`Y]bgWXY`Y»`]WX`7i ffm`i bX`HUbXccf]!; Yf]WXhYbž`Ui Z G]Y`k UfhYb"
- H\U]`ÀbX]gWXY`? Ògh`]WX`\_Y]hYb.`8Ug`H\U]`A Ub[ `c`]gh VY`Ubbh`ZØf`gY]bY`hfUi a `UZhYb`7i ffm`g`i bX`Zf]gWXYb : fØ`\`]b[ gfc``Yb"

8]Y`k YWXgY`bXY`F YghUi fUb`h`UbXgWX`UZh`]b`A UfnU`b!<Y``YfgXcfZ gd]Y[ `Y`h`X]Y`8mbUa `\_]`i bX`X]Y`\_i`hi fY``Y`J YfgW`a`Y`ni b[ `XYg 6Yn]f`\_g`k ]XYf``9[ U`ž`c`V`G]Y`Ui ZXYf`Gi WX`Y`bUWX`Y]bYa` `gW`bY``Yb A ]hhU[ YggYbž`Y]bYa` `Ui g[ YZU``YbYb`8]bbYf`c`XYf`Y]bYa [ Ya` Øh`]WX`Yb`7UZ`Ā`g]bX` ` \]Yf`k YfXYb`G]Y`ZØbX][ ` "A UWX`Yb`G]Y`g]WX Ui Z`X]Y`\_i` `]bUf]gWXYb`<YfUi gZcfXYfi b[ Yb`]b`A UfnU`b!<Y``YfgXcfZ ni` `YbhXYW`\_Yb`°

## 6`6YgcbXYf`Y]hYb`XYf`5fWX`]hY`\_hi`f.`J`cb D`UhhYbVUi` `V]g`A`cXYfbY

A UfnU`b!<Y``YfgXcfZž`Y]b`6Yn]f`\_j`cb`6Yf`]bž`]gh`Y]b`ZUgn]b]YfYbXYg 6Y]gd]Y``ZØf`UfWX`]hY`\_hcb]gWXY`9bhk`]W`\_i`b[ Yb`]b`XYf`Y`Ya`U`][ Yb 88F`"8]Y`6YhcbUfWX`]hY`\_hi`fž`VY`Ubbh`U`g`D`UhhYbVUi`ž`dfĀ[ `h`XUg GhUXhV]`X`i`bX`YfnĀ`\`h`; YgWX`]WX`hYb`j`cb`XYf`gc`n]U`]gh]gWXYb JYf[ Ub[ Yb`\Y]h" : i b`\_h]cbU`]hĀ`hi`bX`9ZZ]n]Ybn`ghUbXYb`]a JcfXYf[ fi`bXž`k`Ug`XYb`hmd]gWXYb`D`UhhYbVUi`hYb`Y]bY WX`UfU`\_hYf]gh]gWXYž`Y]bn][ Ufh][ Y`Ÿ`gh`Y`h]`\_j`Yf`Y]\`h"8]Y VYY]bXfi`W`\_YbXY`?ca`V]bUh]cb`Ui`g`Zi`b`\_h]cbU`Ya` `K`c`b`f`Ui`a` `i`b`X`a`c`XYfb`Yb`UfWX`]hY`\_hcb]gWXYb`9]bZØggYb`a`UWX`h`X]YgYb`6Yn]f`\_ni Y]bYa` `gdUbbYbXYb`N]Y``ZØf`5fWX`]hY`\_hi`f]b`hYfYgg]YfhY"

ð`XYb`%-`+`\$Yf`:`J`fYb`k`Uf`A`UfnU`b!<Y``YfgXcfZ`Ui`ZXYf`Gi`WX`Y`bUWX`gW`bY``Yb`@Øgi`b[ Yb`ZØf`XYb`K`c`b`f`Ui`a`a`Ub[ Y`Xi`fWX`X]Y`A`][ fUh]cb`]b`X]Y`<`Ui`d`hghUX`h" `D`UhhYbVUi`hYb`Yb`hghUbXYb`k`]Y`D`]nY`Ui`g`XYa` `6cXYb`i`bX`V]YhYb`bi`b`a`Y`f`U`g`%\$\$\$`\$\$\$`9]bk`c`b`Yfb`Y]b`Ni` \`Ui`gY`"8]YgY`K`c`b`Zcfa`Yb`g]bX`b]WX`h`bi`f`Zi`b`\_h]cbU`ž`gcbXYfb`\`UVYb`Ui`WX`ZUfVYbZfc`Y`Y` : UggUXYb`Yf`U`hYbž`X]Y`XYf`Y]bgh[ fUi`Yb`i`a` [ YVi`b[ `@VYb`Y]b`Ui`WX`Yb"

9]bY`XYf`VYa Yf\_Ybgk YfhYghYb`9][ YbgWUZhYb`XYf  
D`UhhYbVUi UfW ]hY\_hi f`]gh`]\fY`A cXi `Uf]h`h"8 ]Y`Y]bnY`bYb`D`UhhYb  
k i fXYb`]b` : UVf]\_Yb`j cf[ YZYfh][ hi bX`j cf`C fh`ni gUa a Yb[ YgYhnhž  
k Ug`Y]bY`gW`bY`Y`6Ui k Y]gY`Yfa Ò[ `]W`hY"8 ]YgYg`?cbnYdh`k i fXY  
gW`bY`ni a `A Uf\_YbnY]W`Yb`XYg`gcn]U`]gh]gW`Yb`Gh`XhYVUi g"l a  
XYb`a cbchcbYbž[ fUi Yb`9]bXfi W`Ui Zni `cW`Yfbž`k i fXYb`j ]Y`Y  
X]YgYf`; YV`Ai XY`a ]h`Vi bhYb`A U`YfY]Yb`i bX`@c[ cg`Ui g[ YghUhhYhž  
X]Y`cZh`X]Y`c`U`Y`≠Ybh]h`h`k ]XYfgd]Y[ Y`b"

- K `Àfa YX`Àa a i b[ .`J ]Y`Y`D`UhhYbVUi hYb`k i fXYb`]b`XYb  
`YhnhYb`≠]\fYb`fYbcj ]Yfh`i bX`a ]h`a cXYfbYf  
K `Àfa YX`Àa a i b[ `U\_hi U`]g]Yfhž`k cXi fW`g]Y`YbYf[ Yh]gW  
YZZ]n]YbhYf`k i fXYb"
- ; UfhYbghUXh!≠XY`Y`≠`Y]b][ Yb`6YfY]W`Yb`k i fXYb`X]Y  
D`UhhYbVUi hYb`i a `; `ÀfhYb`i bX`; fØbZ`ÀW`Yb`Yfk Y]hYfhž`k Ug  
XYb`K c`b`fUi a `Ui Zk YfhYhi bX`j Yfh]\_U`Y`; `ÀfhYb`ZØfXYfh"
- GUb]Yfi b[ `i bX`l a bi hni b[ .`5i W`b]W`h`a Y`f`[ Ybi hnhY  
D`UhhYbVUi hYb`YfZU`fYb`Y]bY`bYi Y`Bi hni b[ ž`n"6"U`g`GhUfh!  
i d`6Øfcg`cXYf`\_i`hi fY`Y`; fY]nY]hgh`h`hYb"

5VYf`b]W`h`bi f`X]Y`D`UhhYbVUi hYb`a UW`Yb`XYb`6Yn]f\_  
UfW ]hY\_hcb]gW`]bhYfYggUbh"≠`XYb`YhnhYb`≠]\fnY`bYb`g]bX`Ui W  
nU`fY]W`Y`a cXYfbY`6Ui dfc`Y`hY`YbhghUbXYbž`X]Y`Y]bY  
]bhYfYggUbhY`6U`UbW`nk ]gW`Yb`HfUX]h]cb`i bX`A cXYfbY`gW`UZZYb"  
6YgcbXYfg`\Yfj cfni \YVYb`]gh`XUg`7UZ`À`A "ž`Y]b`6Y]gd]Y`ZØf  
]bbcj Uh]j Y`5fW ]hY\_hi f" < ]Yf`hfYZZYb`g]W`5fW ]hY\_hi f`i bX`gcn]U`Y  
Dfc`Y`hYž`i a `XUg`; Ya Y]bgW`UZh]g[ YZØ`]\`b`X]YgYa `YVYbX][ Yb  
6Yn]f`\_ni`gh`Àf`Yb"

8 ]Y`UfW ]hY\_hcb]gW`Yb`6YgcbXYf`Y]hYb`]b`A UfnU`b! < Y`YfgXcfZ  
g]bX`b]W`h`bi f`Ui ZK c`b`VUi hYb`VYgW`f`Àb`\_h"8Yf`; `ÀfhYb`XYf  
K `Y`h`]gh`Y]b`ZUgn]b]YfYbXYg`6Y]gd]Y`ZØf`X]Y`J YfgW`a Y`ni b[ `j cb  
BUhi f`i bX`5fW ]hY\_hi f"8 ]YgYf`k Y]h`Ai Z[ Y`DUf`\_V]YhYh  
]bhYfbUh]cbU`Y`; UfhYbgh]Y`Ui g`U`Yf`K `Y`hž`X]Y`[ YgW ]W`h`a ]h  
a cXYfbYa `@UbXgW`UZh]gXYg][ b`\_ca V]b]Yfh`k i fXYb"6Ygi W`Yf  
\_ØbbYb`]\Yf`X]Y`j YfgW ]YXYbYb`; UfhYb`UbXgW`UZhYb`Yf`\_i bXYbž  
X]Y`j cb`Ug]Uh]gW`Yb`NYb!; `ÀfhYb`V]g`ni`a YX]hYffUbYb`C UgYb  
fY]W`Yb"

; UfhYbgh]	6YgcbXYf\Y]hYb
\JdUb]gWXYf'; UfhYb	NYb!9`Ya YbhYž'ghY]bYfbY`K Y[ Yž K UggYfgd]Y`Y
≠U`]Yb]gWXYf'; UfhYb	Gma a Yhf]gWXY DZUbNybUbcfXbi b[ ž'HYffUggYb i bX`G_i `dhi fYb
C f]YbhU`]gWXYf'; UfhYb	? i bghj c`Y`6fi bbYbž'Ødd][ Y J Y[ YhUh]cbž]bh]a Y`D`ÀhnY

9]b`k Y]hYfYg`VYa Yf\_Ybgk YfhYg`6Ui dfc`Y\_h]gh`X]Y`K c`bhi fa  
A UfnU`bž`X]Y`a ]h]\fYf`<Ø\Y`i bX`a cXYfbYb`; `UgZUggUXY`Y]bYb  
ghUf\_Yb`?cbhfUgh`ni `XYb`i a `]Y[ YbXYb`D`UhhYbVUi hYb`V`]XYh"  
8]YgYg; YVÀi XY`ghY`h`b]W`h`bi f`ZØf`a cXYfbYb`K c`bfi a ž  
gcbXYfb`Ui W`ZØf`XUg`\_fYUh]j Yg`GhUXhYVYbž`XUg`\]Yf[ YZØfXYfh  
k ]fX`"A ]h`6`]W`\_Ui ZX]Y`6Yf`]bYf`G\_m]bY`]gh`XYf`K c`bhi fa `Y]b  
VY`]YVhYf`D`Uhm`ZØf`^ b[ Y` : Ua `]Yb`i bX`?fYUh]j Y"

8]Y`gcn]U`Yb`9]bf]W`hi b[ Yb`i bX`X]Y`GW`i `UfW`]hY`\_hi f`]b`A UfnU`b!  
<Y`YfgXcfZ`\UVYb`g]W`YVYbZU`g`[ Yk UbXY`h`GW`i `Yb`k ]Y`X]Y`  
: f]YXf]W`!j cb!6cXY`gW`k ]b[ \!GW`i `Y`g]bX`\Yi hY  
UfW`]hY`\_hcb]gW`Y`<][ \`][ \hgž`X]Y`6`]Xi b[ `i bX`a cXYfbY`@Y`fY  
j YfY]bYb`" ÆfY`cZYbYb`FÀi a Y`i bX`\Y`Y`; YghU`hi b[ `ZØfXYfb`X]Y  
?fYUh]j ]h`Àhi bX`XUg`@YfbYb`XYf`GW`Ø`Yf]bbYb`i bX`GW`Ø`Yf"

A UfnU`b!<Y`YfgXcfZ`]gh`Y]b`6Yn]f\_ž`XYf`UfW`]hY`\_hcb]gW`Y  
; YgW`]W`hYb`Yfn`À`h` `j cb`XYb`5bZ`Àb[ Yb`XYf`D`UhhYbVUi hYb`V]g  
\]b`ni `a cXYfbYb`K c`bdfc`Y`hYb`i bX`ØZYbh`]W`Yb`9]bf]W`hi b[ Yb`  
8]YgY`Y]bn][ Ufh][ Yb`6Ui k Yf\_Y`a UW`Yb`XYb`GhUXhhY`]b]W`h`bi f`ni  
Y]bYa `gdUbbYbXYb`Cfh`ni a `@VYbž`gcbXYfb`Ui W`ni `Y]bYa `Cfhž  
Ub`XYa `; YgW`]W`hYž; Ya Y]bgW`UZh`i bX`nY]h[ Ya `À» Yg`8Yg][ b  
\Ufa cb]gW`a ]hY]bUbXYf`j YfVi bXYb`k YfXYb`"K Ybb`G]Y`U`gc  
Xi fW`X]Y`GhfU» Yb`j cb`A UfnU`b!<Y`YfgXcfZ`]gW`YbXYfbž`bY`a Yb  
G]Y`g]W`Y]bYb`A ca Ybh`NY]hž`i a `X]Y`UfW`]hY`\_hcb]gW`Yb` : Y]b`Y]hYb  
ni `YbhXYW`\_Ybž`X]Y`XYb`6Yn]f`\_gc`Y]bn][ Ufh][ `a UW`Yb"

? i bgh`]a `6Yn]f`\_` ; U`Yf]Yb`i bX`\_fYUh]j Y  
< c hgd c hg`Yb`hXYW`\_Yb

A UfnU\b!<Y`YfgXcfZa U[ `Ui ZXYb`YfghYb`6`]W\_`U`g`Y]b`6Yn]f\_`XYf  
D`UhhYbVUi hYb`k ]f\_YbžXcW\` ]bhYf`XYf`cZhi` bhYfgW`ÀhnhYb  
: UggUXY`j YfV]f[ h`g]W\`Y]b`YVYbX][ Yf`i bX`XmbUa ]gW`Yf  
?i bghgY\_`hc fž`XYf`k Y]hfY]W`YbXY`\_fYUh]j Y`5i gXfi W\_gZcfa Yb  
V]YhYh`J`c b` ; U`Yf]Ybž`X]Y`c`\_U`Y`?Øbgh`Yf`df`ÀgYbh]YfYbž`V]g` \]b`ni  
C Z]GdUW`gž`X]Y`XYb`8]U`c[ `nk ]gW`Yb`?i bghi bX` ; Ya Y]bgW`UZh  
ZØfXYfbž`ÀXh`X]YgYf`6Yn]f\_`XUni`Y]bž`Yf`\_i bXYh`ni`k YfXYb"

9]b`nYbhfU`Yf`C fh]b`XYf`?i bghgnYbY`]gh`X]Y`GhUXhhY`]V]V`]c`h`Y\_`  
]a`A UfnU\bYf`NYbhf`i a` "<]Yf`Z]bXYb`fY[ Y`a`À»][ Y`5i gghY`i b[ Yb  
ghUhhž`X]Y`K Yf\_Y`j`c b`Ui ZghfYVYbXYb`?Øbgh`Yfb`gck ]Y`fY[ ]c bU`Yb  
HU`YbhYb`df`ÀgYbh]YfYb`"8]Y`k YW`gY`bXYb`5i gghY`i b[ Yb`g]bX`c Zh  
h`Ya Uh]gW`Ui g[ Yf]W`hYhi bX`UXYb`X]Y`6Ygi W`Yf`XUni`Y]bž`ØVYf  
nY]h[ Yb`Øgg]gW`Y`H`Ya Yb`bUW`ni XYb`\_Yb"

9]b`k Y]hYfYf`\_fYUh]j Yf`< chgdch]gh`XUg`?i`hi`f`U`i`g`<Y`YfgXcfZ`"  
BYVYb`A`i`g]\_i bX`H`YUhYf`gcf[ h`XUg`<Ui`g`Ui`W`ZØf`Y]bY`D`UhhZcfa  
ZØf`V]`XYbXY`?i bgh`<]Yf`k YfXYb`b]W`h`bi`f`5i gghY`i b[ Yb  
[ Y`cghYhž`gcbXYfb`Ui`W`K`cf\_g`l`cdg`i bX`@Ygi b[ Ybž`X]Y`XUg  
; Ya Y]bgW`UZh]g[ YZØ`gh`Àf`\_Yb`i bX`XYb`\_fYUh]j Yb`5i ghUi`gW`  
ZØfXYfb"

- ?i bgh`]a`5VgY]hg.`9]b`Dfc`Y`hž`XUg`?Øbgh`Yf`]b`k Yb][ Yf  
VY`\_UbbhYb`9W`\_Yb`XYg`6Yn]f\_g`ni gUa`a`YbVf]b[ hi bX`gca`h  
]bbcj Uh]j Y`?i bghdf`ÀgYbhUh]cbYb`]b`i bYfk UfhYhYb  
@cWUh]cbg`Yfa`Ò[ `]W`h"
- 5hY`]Yf[ Ya Y]bgW`UZh.`@`\_U`Y`?Øbgh`Yf`gW`UZZYb`]a  
;`Àb[ Yj ]YfYW`<Y`YfgXcfZ`Y]bYb`Yfn`]W`Yb`FUi`a`ni`f  
Ni`gUa`a`YbUfVY]h`i bX`b`gd]fUh]cb"
- CdYb!5]f!`?i bgh.`GWUhYfYX`UVci`h`UfY`a`i`fU`g`UbX`di`V`]W  
Ufh]bghU`Uh]cbg`h`Uh]bj ]hY`dUggYfgV`m`hc`dUi`gY`UbX  
Yb[ U[ Y`k ]h`h`Y`Ufh`c`Z`A UfnU\b!<Y`YfgXcfZ"

8]Y`J]Y`ZU`h`XYf`?i bgh`k ]fX`Ui`W`]b`XYf`À`f`]W`Yb`?i bghb`UW`h  
A UfnU\b!<Y`YfgXcfZ[ YZY]Yfž`VY]`XYf` ; U`Yf]Ybž`5hY`]Yfg`i bX  
\_i`hi`fY`Y`9]b]f]W`hi b[ Yb`]Y`fY`HØfYb`ØZbYb`"8]YgY`J`YfUbghU`hi b[  
V]YhYh`b]W`h`bi`f`X]Y`A`Ò[ `]W`\_Y]hž`?i bghk Yf\_Y`ni`\_`Ui`ZYbž`gcbXYfb  
Ui`W`X]fY`\_h`a`]h`XYb`?Øbgh`Yfb`]bg` ; Ygdf`ÀW`ni`\_`ca`a`Yb`i`bX

XYfYb`\_fYUh]j Y`DfcnYggY`VYggYf`ni`j YfghY\Yb"

: Øf`?i bgh`jYV\UVYf`XUfZ`Y]b`6Ygi W\`ja`?i bgh\Ui`g`6Yf`]b`b]W\h  
ZY\`Yb"8 Ug`?i bgh\Ui`g`\Uh`X]Y`A`[gg]cbž`nY]h[ Yb`Øgg]gW\Y`?i bgh  
Y]bYa`VfY]hYfYb`Di`V`\_]i a`b`Å\Yfni`Vf]b[ Yb`i`bX`k`]fX`cZi`ZØf`gY]bY  
]bbcj`Uh]j Yb`i`bX`]bhYfU`\_h]j Yb`5i`gghY`i`b[ Yb`[ Y`cVh`K`cf\_g\cdg  
i`bX`J`YfU`bghU`hi`b[ Yb`ZØf`?]bXYf`i`bX`9fk`UW\gYbY`gcf[ Yb`XUZØfž  
XUgg`?i bgh`ZØf`YXYb`ni`[ Åb[`]W\`k`]fX"

8 Ug`6Yf`]bYf` : Yb`ghYf`]gh`Y]b`k`Y]hYfYg`6Y]gd]Y`ZØf`X]Y`\_fYUh]j Y  
Bi`hni`b[ `j`cb` ; Ya`Y]bgW\UZhgf`Åi`a`Ybž`]b`XYa`Ghi`X]YfYbXY`i`bX  
`c\_U`Y`?Øbgh`Yf`fY[ Y`a`Å»][ `ni`gUa`a`YbUfVY]hYbž`i`a  
; Ya`Y]bgW\UZhgd`fc`Y`\_hY`ni`gW\UZZYb`i`bX`K`cf\_g\cdg`UVni`U`hYb"  
8]Y`cZYbYb`5hY`YfY`g]bX`Y]bY`[ fc»Ufh][ Y` ; Y`Y[ Yb\Y]hž`i`a  
\_fYUh]j Y`DfcnYggY`X]fY`\_h`a`]hni`Yf`YVYb`i`bX`gY`Vgh`U`\_h]j`ni  
k`YfXYb"

Ni`g`Åhn`]W\`ni`XYb`YhUV`]YfhYb` ; U`Yf]Yb`[ ]Vh`Yg`nU\`fY]W\Y`Dcd!i`d!  
; U`Yf]Yb`i`bX`\_fYUh]j Y`≠]h]Uh]j Ybž`X]Y`fY[ Y`a`Å»][ `]b`A`UfnU\b!  
<Y`YfgXcfZ`Yb`hghY\Yb"8]YgY`hYa`dcf`ÅfYb`?i bghf`Åi`a`Y`hfU[ Yb`ni`f  
`YVYbX][ Yb`?i bghgnYbY`VY]i`bX`n]Y\Yb`cZi`c\_U`Y`?Øbgh`Yf`i`bX  
?i bgh]bhYfYgg]YfhY`Ub" `G]Y`g]bX`]XYU`ž`i`a`X]Y`bYi`YghYb  
9bhk`]W`\_i`b[ Yb`]b`XYf`c\_U`Yb`?i bghgnYbY`ni`Yb`hXYW`\_Yb"

9]b`k`Yb][ `cZi`h\Y!VYUhYb!dUh`Z]bXYh`a`Ub`Ui`W\`X]Y`F`i`bX[ Åb[ Y  
Xi`fW\`X]Y`GhfU»Yb`\_i`b`gh" `J`YfgW\]YXYbY`[ YZØ\fhY`Hci`fYb  
\_fYi`nYb`Xi`fW\`XYb`6Yn]f`\_i`bX`nY][ Yb`X]Y`VYY]bXfi`W`YbXYb  
K`UbXa`U`YfY]Ybž`X]Y`X]Y`GhUXh]j`YfgW\`ØbYfb"8]YgY`5fh`XYf`?i bgh  
]gh`VYgcbXYfg`gdUbbYbXž`XU`g]Y`gh`ÅbX][ `]a`K`UbXY`]gh`i`bX`X]Y  
K`Yf`\_Y`cZi`Y]bYb`gcn]U`Yb`cXYf`dc`]h]gW\Yb`?ca`a`Yb`hUf`UV[ YVYb"

≠g[ YgUa`h`V]YhYh`A`UfnU\b!<Y`YfgXcfZ`Y]bY`gdUbbYbXY`i`bX  
j`]Y`Z`Å`h][ Y`?i bghgnYbYž`X]Y`Yg`ni`Yb`hXYW`\_Yb`[ ]h" `9[ U`ž`cV`a`Ub`Y]b  
?i bghbYi`]b[ `cXYf`Y]b`YfZU\`fYbYf`?Yb`bYf`]ghž`XYf`6Yn]f`\_]gh`Y]b  
C`fhž`Ub`XYa`?fYUh]j]h`Å`h`i`bX` ; Ya`Y]bgW\UZh`Ui`Z]bgd]f]YfYbX`K`Y]gY  
ni`gUa`a`Yb`\_ca`a`Yb"8 Ug`]gh`X]Y`k`U\`fY`GYY`Y`j`cb`A`UfnU\b!  
<Y`YfgXcfZ`Y`YVYbX][ ž`XmbUa`]gW\`i`bX`XUfUi`Z`Ui`g[ Y`Y[ hž`]b`XYb  
?ØdZYb`i`bX`<YfnYb`XYf`A`Yb`gW\Yb`k`Y]hYfni`k`]f`\_Yb"

8YhU]`g

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