

F UghUhh'9b hXYW_Yb. '5`hghUX hnUi VYf'i bX
B Uhi fUVYb hYi Yf`ZØf`XY]b`K c WX YbYbXY

9b hXYW_Yb`G]Y`F UghUhh.`\]ghc f]gWX Y`5`hghUX hž'a U`YghÀh]gWX Y
GWX`ØggYfž`_i`_]bUf]gWX Y`GdYn]U`]hÀhYb`i bX`B Uhi fUVYb hYi Yf`
8Yf`dYfZY`_hY`K c WX YbYbXUi gZi [`k UfhYh`



K]``ca a Yb`]b`F UghUhhž`Y]bYf`WX Ufa UbhYb`GhUXh`]a`<YfnYb`j cb
6UXYb!K ØfhYa VYf[ž`X]Y`g]WX`dYfZY`_h`ZØf`Y]bYb`i bj Yf[Ygg`]WX Yb
K c WX YbYbXUi gZi [`Y][bYh`<]Yf`hf]Zž; YgWX]WX hY`Ui Z'a cXYfbY
@YVYbgUfhž`i bX`X]Y`a U`Yf]gWX Yb`GhfU» Yb`XYf`]\]ghc f]gWX Yb`5`hghUXh
`UXYb`XUni`Y]bž`Yf`_i bXYh`ni`k YfXYb`"A]h`a U`YghÀh]gWX Yb
GWX`ØggYfbž`dfUWX hj c``Yb`; ÅfhYb`i bX`Y]bYf`J]Y`nU```Ub
i`]bUf]gWX Yb`<][`]\][`hg`_Uh`F UghUhh`Y]b][Yg`ni`V]YhYbž`Y[U`cV
G]Y`Y]b`; YgWX]WX hgZUbž`Y]b`Y]bgWX a YW_Yf`cXYf`Y]b
B Uhi f`]YV\ UVYf`g]bX`" ð`X]YgYa`5fh]_Y`bY\`a Yb`k]f`G]Y`a]h`Ui Z
Y]bY`FY]gY`xi fWX`X]Y`ZUgn]b]YfYbXYb`Y UWX`hhYb`X]YgYf`GhUXh`i bX
]\fYf`I a [YVi b["J cb`_i`hi fY``Yb`J YfUbgH`hi b[Yb`V]g`]\]b`ni
C i hXccf!5VYb hYi Yfb` ``UggYb`G]Y`g]WX`]bgd]f]YfYbž`F UghUhh`]b`U`
gY]bYf`DfUWX`h`ni`Yb hXYW_Yb`°

9b hXYW_i b ['XYf` \]ghc f]gWk Yb '5`hghUXh'j c b F UghUhh

F UghUhhž`Y]bY`Wk Ufa UbhY`GhUXh'ja `6i bXYg`UbX`6UXYb!
K ØfhYa VYf[ž`V]YhYh'Y]bY`ZUgn]b]YfYbXY`A]gWk i b [`Ui g
; YgWk]Wk hY`i bX`?i`hi f`"8]Y` \]ghc f]gWk Y`5`hghUXhž`X]Y`g]Wk`i a`XYb
A Uf`hd`Uhn'[fi`dd]Yfhž`]gh`Y]b`k U`fYg`ž`k Y`ž`XUg`Yg`ni`Yb hXYW`Yb
[]h`<]Yf`k YfXYb`6Ygi Wk Yf`a]h`a U`Yf]gWk Yb`; UggYbž
UbgdfYWk YbXYf`5fWk]hY`_hi f`i bX`Y]bYa`Y]b`UXYbXYb`:`U]f
Ya dZUb[Yb"

9]b` \YfUi gfU[YbXYg`A Yf`_a U`XYf`5`hghUXh']gh`XUg`fYgdY`_hj c``Y
9fVY`XYf`6UfcW`UfWk]hY`_hi fž`XUg`]b`j]Y`Yb`; YVÅi XYb`XYi h']Wk
g]Wk hVUf`]gh`"8]YgY`5fWk]hY`_hi fž`[YdfÅ[hij cb`[fc» nØ[] [Yb
: UggUXYb`i bX`[YgWk k i b [YbYb`: cfa Ybž`]gh`XUg`9f[YVb]g`XYf
6Ui dfc`Y`_hYž`X]Y`ja`%, " `š` \ f`i bXYfh`i bhYf`XYf`< YffgWk UZh`XYf
A Uf`_ [fUZyb`j cb`6UXYb`Xi fWk [YZØ`fh`k i fXYb"

9]b`VY`YVhYf`5i g[Ub[gdi b`_h`ZØf`9f`_i bXi b [Yb`]gh`XYf`A Uf`hd`Uhnž
XYf`j cb`Y]bXfi W`_gj c``Yb` \]ghc f]gWk Yb`; YVÅi XYb`i a [YVYb`]gh`
<]Yf`Z]bXYb`6Ygi Wk Yf`XUg`F Uh`Ui gž`Y]b`k i bXYfgWk ØbYg`6Y]gd]Y`
VUfcW`Yf`6Ui`_i bgh`"8]fY`_h`XUbYVYb`ghY`h`X]Y`Gh`"5`Yi UbXYf
?]fWk Yž`XYfYb`VYY]bXfi W`YbXYg`ž`bYfYg`a]h`_i bghj c``Ya`Ghi W`
i bX`k i bXYfgWk ØbYb`; `UgZYbghYfb`VYgh]Wk h"

9]b`k Y]hYfYf`< Ø`Ydi b`_h`]gh`XUg`K UggYfgWk`cgg`F UghUhhž`XUg`g]Wk
Ua`F UbXY`XYf`5`hghUXh`VYZ]bXYh`"9g`]gh`b]Wk h`bi f`Y]b
UfWk]hY`_hcb]gWk Yg`A Y]ghYfk Yf`_ž`gcbXYfb`V]YhYh`Ui Wk`Y]bYb
 \Yff`]Wk Yb`6`]W`_Ui Z`X]Y`i a` `Y[YbXYb`; ÅfhYb`i bX`XYb
k Y]h`Åi Z[Yb`DUf`_"8]Y`<U`Yb`i bX`F`Åi a`Y`XYg`GWk`cggYg`g]bX`a]h
dfÅWk h[Yb`A ØVY`b`i bX`?i bghk Yf`_Yb`_Ui g`j YfgWk]YXYbYb
9dcWk Yb`Ui g[YghUhhYhž`X]Y`X]Y`dfi b`_j c``Y`; YgWk]Wk hY`XYf
A Uf`_ [fUZyb`j YfUbgWk Ui`]Wk Yb"

8]Y`GhUXh`ÅXh`ni a`:`Ub]YfYb`Y]bž`i bX`k Å`fYbX`≠fYg
GdUn]Yf[Ub[g`Xi fWk`X]Y`5`hghUXh`gc`hYb`G]Y`b]Wk hij YfgÅi a`Ybž
Y]b[Y`XYf`Wk Ufa UbhYb`7UZÅg`i bX`_Y]bYb`; YgWk ÅZhY`ni
VYgi Wk Yb`" <]Yf`_Ubb`a Ub`c`_U`Y`GbUW`_g [Yb]Y» Yb`i bX

\UbX[YZfh][hY'DfcXi_hY_UiZYbžX]Y'dYfZY_hY'Gci j Yb]fgj cb
⇒fYa '6Ygi Wk'g]bX"

I a 'a Y\ f'ØVYf'X]Y'; YgWk]Wk hY'j cb'F UghUhh'ni 'YfZU\ fYbž'c\ bh'g]Wk
Y]b'6Ygi Wk'ja 'GhUXha i gYi a 'F UghUhhž'k c'5i gghY''i b[Yb'ni f
GhUXh[YgWk]Wk hYž'ni f'?'i bgh'i bX'ni a 'U''hÀ[']Wk Yb '@VYb'XYf
ZfØ\ fYb'6Yk c\ bYf'dfÀgYbh]Yfh'k YfXYb"'<]Yf'Z]bXYb'fY[Y'a À»][
J YfUbghU'hi b[Yb'i bX': Ø\fi b[Yb'ghUhhž'X]Y'XUg' ðhYfYggY'XYf
6Ygi Wk Yf'k YW_Yb"

8]Y'5'hghUXh]gh'b]Wk h'bi f'ZØf'; YgWk]Wk hg]bhYfYgg]YfhY
ZUgn]b]YfYbXž'gcbXYfb'V]YhYh'Ui Wk'Y]bY''YVYbX][Y'?'i 'hi f!'i bX
?bY]dYbgnYbY"'5a '5VYbX'YfV'Ø'h'XYf'D'Uhm']b'Vi bhYb '@Wk hYfbž
i bX'nU\ fY]Wk Y'F YghUi fUbhg'i bX'6Ufg'UXYb'XUni 'Y]bž'X]Y
fY[]cbU'Y'?'ØWk Y'i bX'K Y]bY'ni '[Yb]Y» Yb"'8]Y'YbhgdUbbhY
5ha cgd\ ÁfY'a UWk h'Yg''Y]Wk hž'bYi Y'6Y_UbbhgWk UZhYb'ni 'gWk']Y» Yb
i bX'XYb'5VYbX'ni '[Yb]Y» Yb"

9]b'VYgcbXYfg'VY']YVhYg'9j Ybh']b'XYf'5'hghUXh]gh'XYf
K Y]\ bUWk hga Uf_hž'XYf'À\ f']Wk']b'XYf'J cfk Y]\ bUWk hgnY]h
ghUhhž]bXYh"'8Yf'A Uf_h'k]fX'j cb'Zygh'Wk '[YgWk a ØW_hYb'GhÀbXYb
i bX'Y]bYf'Ui g[Y'UggYbYb'Gh]a a i b['[YdfÀ[h"'<]Yf'_ØbbYb'G]Y
hfUX]h]cbY''Y '@YW_YfY]Yb'dfcV]YfYbž'\UbX[YZfh][hY'; YgWk Yb_Y
_Ui ZYb'i bX'X]Y'Zygh'Wk Y'6Y'Yi Wk hi b['[Yb]Y» Yb"

⇒a a Yf'k]YXYf' []Vh'Yg'_Y]bY'J YfUbghU'hi b[Ybž'k]Y'?'cbnYfhY'cXYf
?'i bghUi gghY''i b[Ybž'X]Y']b'j YfgWk]YXYbYb'9W_Yb'XYf'5'hghUXh
ghUhhž]bXYb"'<U'hYb'G]Y'XU\ Yf'X]Y'5i [Yb'cZZYb'i bX'ZfU[Yb'G]Y
Yj Ybhi Y'']b' ⇒fYa ' <c hY''bUWk 'U_hi Y''Yb'9j Ybhgž'X]Y'k À\ fYbX
⇒fYg'5i ZYbh\ U'hg'ghUhhž]bXYb"

⇒'F UghUhh' []Vh'Yg']a a Yf'Yhk Ug'ni 'YbhXYW_Ybž'i bX'X]Y'\]ghcf]gWk Y
5'hghUXh'V]YhYh'ZØf'YXYb'; YgWk a UW_Yhk Ug"'CV'VY]a '6i a a Y'b
Xi fWk'X]Y'j Yfk]b_Y'hYb'; UggYbž'VY]a ' ; Yb]Y» Yb'Y]bYg'; YhfÀb_g
Ui ZY]bYa 'XYf'j]Y'Yb'D'ÀhmY'cXYf'VY]a '9]bhUi Wk Yb']b'X]Y
; YgWk]Wk hY' 'F UghUhh'\ Uh'Y]bYb'i bj Yf[Ygg'Wk Yb'7\ Ufa Yž'XYb
a Ub'Y]bZUWk 'Yf'YVYb'a i gg"

A U`Ygh`h]gW`Y`GW``OggYf`i bX` ; `f`hYb`]b`XYf`
l a [YVi b[

8]Y`FY[]cb`i a` F UghUhh`]gh`b]W`h`bi`f`Z0f`]\fY`]\]ghcf]gW`Y`5`hghUXh`
VY`_Ubbh`ž`gc`bXYfb`Ui`W`_Z0f`X]Y`VYY]bXfi`W`_YbXYb`GW``OggYf`i bX`
; `f`hYb`ž`X]Y`]b`XYf`l a [YVi b[`ni`_Z]bXYb`g]bX`"8]YgY`
a U`Ygh`h]gW`Yb`6Ui`k`Yf`_Y`g]bX`NYi` [b]ggY`j`cb`j`Yf[Ub[YbYf`
DfUW`h`i`bX`UXYb`XUni`Y]bž`]b`X]Y` ; YgW`]W`hY`Y]bni`hUi`W`Yb`"

GW``c`gg`F`UghUhh`]gh`XUg`YfUi`gfU[YbXY`6Y]gd]Y`XYf`VUfc`W`_Yb`
5fW`]hY`_hi`f`]b`XYf`FY[]cb`"9fvUi`h`nk`]gW`Yb`%+\$`\$`i`bX`%+\$`ž`ghY`h`
XUg`GW``c`gg`Y]b`A`Y]ghYfk`Yf`_XYf`6Ui`_i`bgh`XUf`i`bX`gd]Y`h`Y]bY`
VYXYi`hYbXY`F`c`Y`]b`XYf` ; YgW`]W`hY`XYg`<Ui`gYg`6UXYb`"8]Y`
: UggUXY`XYg`GW``c`ggYgž`a`]h`]\fYb`_`Ugg]gW`Yb`9`Ya`YbhYb`i`bX`
_i`bghj`c`Y`b`8YhU]`gž`n]Y`h`YXYb`6Ygi`W`Yf`]b`]fYb`6Ubb`"8]Y`
dfi`b`_j`c`Y`b`F`Ai`a`Y`g]bX`c`Zi`Z0f` : 0`fi`b[Yb`[Y0ZbYhž`X]Y`Y]bYb`
h]YZYb`9]bV`]W`_]b`XUg`@YVYb`XYf` : 0fghYb`i`bX`X]Y`?`i`bgh`XYf`
XUa`U`][Yb`NY]h`V]YhYb`"

8Yf`GW``c`gg[Uf`hYb`F`UghUhh`]gh`XUg`]XYU`Y` ; Y[Ybgh0W`_ni`a`
GW``c`gg`gY`Vgh`"A`]h`gY]bYb`[Yca`Yhf]gW`_Ub[Y`Y[hYb`K`Y[Ybž`
Vi`bhYb`6`i`a`YbVYYhYb`i`bX`5`YY!DZUbni`b[Yb`gW`UZZh`XYf` ; Uf`hYb`
Y]bY`5ha`cgd`ÅfY`XYf`F`i`Y`i`bX`6Yg]bb`]W`_Y]h`"8]Y`dYfZY`_hYb`
D`ÅhY`ni`a`G]h`hYb`i`bX`9bhgdUbbYb`UXYb`XUni`Y]bž`g]W`_a`]h`
Y]bYa`6`i`W`_ni`f0W`_ni`n]Y`Yb`cXYf`Y]bZUW`X]Y`BUh`f`ni`[Yb]Y»Yb`"

9]b`k`Y]hYfYf`VYa`Yf`_Ybgk`YfhYf`C`fh`]b`XYf`B`Å`Y`j`cb`F`UghUhh`]gh`
XUg`GW``c`gg` : Uj`c`f]hY`ž`XUg`Yhk`U`%\$`?`]ca`YhYf`YbhZYfbh`]Y[h`
8]YgYg`GW``c`ggž`XUg`]a`%`,`"`ž`f`i`bXYfhYfVUi`h`k`i`fXYž`X]YbhY`U`g`
@`ghgW``c`gg`XYf`A`Uf`_ [f`ÅZ]b`G]Vm`U`5i` [i`ghU`j`cb`6UXYb`!6UXYb`"
8]Y`W`Ufa`UbhY`5fW`]hY`_hi`f`i`bX`X]Y`[YgW`a`UW`_j`c`Y`[YghU`hYhYb`
; `f`hYb`a`UW`Yb`Yg`ni`Y]bYa`dYfZY`_hYb`N]Y`Z0f`Y]bYb`
HU[YgUi`gZi` [" <]Yf`Z]bXYb`g]W`_b]W`_h`bi`f`]\]ghcf]gW`Y`9l`dcbUhYž`
gc`bXYfb`Ui`W`_i`bghj`c`Y`DUf`_Ub`U[Ybž`X]Y`g]W`_Yfj`c`ffU[YbX`Z0f`
Y]bYb`GdUn]Yf[Ub[`UbV]YhYb`"

⊕ : fY]Vi`f[`]a`6fY]g[Ui`ž`Yhk`U`Y]bY`Ghi`bXY`j`cb`F`UghUhh`
YbhZYfbhž`[]Vh`Yg`XUg`GW``c`gg`Gh`"DYhYfž`Y]b`k`Y]hYfYg`a`i`gh`gY`Y`"

6YgcbXYfg`VYY]bXfi W_YbX`]gh`X]Y`UhYa VYfUi VYbXY`5i gg]W`h`ØVYf`
 X]Y`K`Y]bVYf[Y`i`bX`X]Y`i`a` [YVi b["8Yf`Ub[fYbnYbXY`DUf`_`V]YhYh`
 nU`fY]W`Y`A`Ø[`]W`_Y]hYb`ZØf`9f`c`i`b[`i`bX`D]W`_b]W`_gž`]XYU`ZØf`
 : Ua`]`Yb`i`bX`B`Uhi`f`]YV`UVYf`"

9]b`VYgcbXYfg`VY`]YVhYf`C`fh`ZØf` ; UfhYb`]YV`UVYf`]gh`XYf`
 GW`c`gg[UfhYb`?`Uf`gfi` \Yž`XYf`b]W`h`bi`f`a`]h`gY]bYb`
 k`Y]h`Äi`Z[Yb`F`UgYbZ`ÄW`Yb`i`bX`_i`bghj`c``Ub[Y`Y[hYb`
 6`i`a`YbVYYhYb`VYY]bXfi W`_hž`gcbXYfb`Ui`W`_a`]h`gY]bYa`
]a`dcgUbhYb`GW`c`gg" `<`]Yf`_`ØbbYb`6Ygi`W`Yf`Yb`hgdUbbhY`
 GdUn]Yf[Äb[Y`a`UW`Yb`i`bX`X]Y`[i`hY`@`Zh`XYf`B`Uhi`f`[Yb]Y»Yb`"8Yf`
 ; UfhYb`VY`YfVYf[h`Ui`»YfXYa`XUg`6UX]gW`Y`@UbXYga`i`gYi`a`ž`
 k`c`a`Ub`a`Y`f`ØVYf`X]Y` ; YgW`]W`hY`XYf`FY[]cb`YfZU`fYb`_`Ubb`"

I`a`X]Y]bYb`6Ygi`W`_]b`X]YgYb`VYY]bXfi W`_YbXYb`GW`c`ØggYfb`i`bX`
 ; ÄfhYb`bcW`_]bhYfYggUbhYf`ni` [YghU`hYbž`Ya`dZY`Yb`k`]f`X]fž`Y]bY`
 : Ø`fi`b[`c`XYf`Y]bY`gdYn]Y`Y`J`YfUbghU`hi`b[`ni`Vi`W`Yb`"
 J]Y`Y`XYf`GW`c`ØggYf`V]YhYb`h`Ya`Uh]gW`Y` : Ø`fi`b[Ybž`X]Y`X]f`X]Y`
 ; YgW`]W`hY`_`]bhYf`XYb`A`Ui`Yfb`b`Ä`YfVf]b[Ybž`k`Ä`fYbX`X]Y`
 ; ÄfhYb`c`Zh`gU]gcbU`Y`9j`Yb`hg`j`YfUbghU`hYbž`X]Y`A`i`g]_ž`?`i`bgh`i`bX`
 ; Ybi`gg`a`]hY]bUbXYf`j`YfV]bXYb`"

GW`c`gg`#` ; UfhYb` 9bhZYfbi`b[`j`cb` 6YgcbXYf`Y]hYb`
 F`UghUhh`

GW`c`gg`F`UghUhh`	X]fY`_`h]b`F`UghUhh`	6UfcW`_Y`5fW`_]hY`_`hi`fž` : Ø`fi`b[Yb`
GW`c`gg`:`Uj`cf]hY`	```\$`_`a`	@`ghgW`c`ggž` DUf`_`Ub`U[Yb`
GW`c`gg`Gh`DYhYf`	*`\$`_`a`	5i`gg]W`h`ØVYf` K`Y]bVYf[Y`
GW`c`gg[UfhYb` ?`Uf`gfi` \Y`	&)`_`a`	@UbXYga`i`gYi`a`ž` _`i`h`i`fY`Y` J`YfUbghU`hi`b[Yb`

8]Y`J`J]Y`ZU`h`XYf`GW`c`ØggYf`i`bX` ; ÄfhYb`fi`bX`i`a`F`UghUhh`V]YhYh`ZØf`
 YXYb` ; YgW`a`UW`_`Yhk`Ug`"C`V`Xi`X]W`ZØf`X]Y` ; YgW`]W`hY`XYf`
 FY[]cb`]bhYfYgg]Yfghž`X]Y`GW`c`Øbb`Y]h`XYf`5fW`_]hY`_`hi`f`VYk`i`bXYfgh`
 cXYf`Y]bZUW`_`bi`f`NY]h]b`XYf`B`Uhi`f`j`YfVf]b[Yb`a`ØW`hYgh`X]YgY`

C fhY`g]bX`Ui Z`YXYb` : U`Y]bYb`6Ygi Wk`Yfh`D`Ub`XY]bY`FY]gY`[i h
i bX`[Yb]Y»Y`X]Y`a U`Ygh`h]gWXY`5ha`cgd`ÀfYž`X]Y`X]YgY`GW`ÒggYf
i bX` ; ÀfhYb`Ui`gghfU`Yb`"

? i `]bUf]gWXY`<] [\ `][\ hg`i bX`c`_U`Y
GdYn]U`]h`hYb`

F UghUhhž`Y]bY`WUfa`UbhY`GhUXh`ja`<YfnYb`6UXYbgž`]gh`b]Wk`h`bi`f
Z0f`]\fY`VYY]bXfi`W`YbXY`5fWk`]hY`_hi`f`i`bX` ; YgWk`]Wk`hY`VY`_Ubbhž
gcbXYfb`Ui`Wk`Z0f`]\fY`_0gh`]WXY`?0WXY`"8]Y`_i`]bUf]gWXY`J]Y`ZU`h
gd]Y[Y`h`X]Y`fY]WXY`c`_U`Y`HfUX]h]cb`k`]XYf`i`bX`j`YfV]bXYh
fY[]cbU`Y`Ni`hUhYb`a`]hY]bYa`<Ui`Wk`j`cb`]bhYfbUh]cbU`Ya` : `U]f`
<]Yf`g]bX`Y]b][Y`_i`]bUf]gWXY`<] [\ `][\ hgž`X]Y`G]Y`VY]`ÀfYa`6Ygi`Wk`
]b`F`UghUhh`b]Wk`h`j`YfdUggYb`gc`hYb`"

9]b`UVgc`i`hYg`A`i`gg`]gh`X]Y`fY[]cbU`Y`GdYn]U`]h`h`A`Ui`h`UgWk`Yb`"
8]YgY`[YZ0`hYb`HY][hUgWk`Ybž`X]Y`c`Zha`U`g`a`]h` : `Y]gWk`ž`Gd]bUh`i`bX`
 ; Yk`0fnYb`ni`VYfY]hY`h`k`YfXYbž`g]bX`b]Wk`h`bi`f`Y]b`?`Ugg]_Yf`XYf
VUX]gWk`Yb`?0Wk`Yž`gcbXYfb`Ui`Wk`gY`f`[YgWk`a`UW`j`c`""C`Zh`k`YfXYb
g]Y`]b`6f0`Y`gYfj`]Yfh`cXYf`Ub[YVfUhYb`"J]Y`Y`F`YghUi`fUbhg`]b
F`UghUhh`V]YhYb`]\fY`Y][YbYb`J`Uf]UbhYb`Ubž`gc`XUgg`G]Y
j`YfgWk`]YXYbY` ; YgWk`a`UW`g`_ca`V]bUh]cbYb`Ui`gdfcV]YfYb`_0bbYb`"

9]b`k`Y]hYfYf`GWk`Uhn`XYf`fUgh`Ài`g`]Wk`Yb` ; Ughfcbca`]Y`]gh`X]Y
6UX]gWk`Y`K`Y]bgWk`Yb`_Yž`]b`XYf`G]Y`X]Y`Y`fj`c`ffU[YbXYb`K`Y]bY`XYf
FY[]cb`dfcV]YfYb`_0bbYb`"6UXYb`]gh`VY`_Ubbh`Z0f`gY]bY
K`Y]bdfcXi`_h]cbž`]bgVYgcbXYfY`Z0f` ; fUi`Vi`f[i`bXYfž
Gd`h`Vi`f[i`bXYf`i`bX`F]Yg`]b[" ; Yb]Y»Yb`G]Y`Y]b` ; `Ug`K`Y]bž
k`À`fYbX`G]Y`X]Y`5i`gg]Wk`h`Ui`Z`X]Y`a`U`Yf]gWk`Y`5`hghUXh`[Yb]Y»Yb
cXYf`Y]bY`XYf`c`_U`Yb` ; ÀfhYb`VYgi`Wk`Yb`"

K`Ybb`G]Y`Y]bY`g0»Y`@YW`YfY]`VYj`c`fni`[Ybž`gc`hYb`G]Y`X]Y
GWk`k`Ufnk`À`XYf`?`]fgWk`hc`fhY`b]Wk`h`j`YfdUggYb`"8]YgYg`VYf0`a`hY
8YggYfhž`XUg`Ui`g`GWk`]Wk`hYb`j`cb`GWk`c`_c`UXYbV]g`_i`]hž`GU`bY`i`bX`
?`]fgWk`Yb`VYghY`hž`\Uh`gY]bYb`l`fgdfi`b[`b]Wk`h`k`Y]h`Yb`hZYfb`h`Ui`g
XYa`GWk`k`Ufnk`U`X`ž`i`bX`F`UghUhh`V]YhYh`Y]b][Y`XYf`VYghYb
J`Uf]UbhYb`X]YgYf`_`Ugg]gWk`Yb`Hc`fhY`"J]Y`Y`7`UZ`g`i`bX`6`ÀW`YfY]Yb
]b`XYf`GhUXh`ghY`Yb`]\fY`Y][YbYb`F`YnYd`hi`fYb`Y`f`i`bX`V]YhYb`X]Y

HcfhY`Zf]gW`Ui g`XYa`CZYb`Ub"

: Øf`X]Y`YI dYf]a`Ybh]YfZfYi`X][`Yb` ; Ui`a`Yb`[`]Vh`Yg`]b`F`UghUhh`Ui`W`
Yh`]W`Y`F`YghUi`fUbh!5b[`YVchYž`X]Y`Ui`g`ÀbX]gW`Y`?ØW`Y`b`Yi`
]bhYfd`fYh]YfYb`"Ni`a`'6Y]gd]Y`df`ÀgYbh]YfYb`Y]b][`Y`F`YghUi`fUbhg`
_Øgh`]W`Y`]hU`]Yb]gW`Y`GdY]gYbž`X]Y`g]W`[`i`h'a`]h`VUX]gW`Yb`K`Y]bYb`
_ca`V]b]YfYb`"UggYb`"8]Y`Z`g]cb]YfhY` ; Ughfcbca`]Y`]gh`YVYbZU`g`
Ui`Z`XYa`J`cfa`UfgW`ž`i`bX`Yg`]gh`b]W`h`i`b[`Yk`Ø`b`]W`ž` ; Yf]W`hY`Ui`g`
j`YfgW`]YXYbYb`?i`h`i`fYb`a`]hY]bUbXYf`ni`j`YfV]bXYb"

<]Yf`]gh`Y]bY`_i`fnY` , VYfg]W`h`ØVYf`Y]b][`Y`XYf`VYghYb`F`YghUi`fUbhgž`
X]Y`G]Y`Yf`YVYb`gc`hYb.

F`YghUi`fUbh	GdYn]U`]h`h
F`YghUi`fUbh`A`Ui`hUgW`Y	<`Ui`g[`Ya`UW`hY`A`Ui`hUgW`Yb
6UX]gW`Y`K`Y]bghi`VY	6UX]gW`Y`K`Y]bY
7UZ`A`Yfj`Y`]Y	GW`k`Ufnk`À`XYf`?`]fgW`hcfhY
HfUhhcf]U`XU`A`Uf]c	≠U`]Yb]gW`Y`DUghU
:`i`g]cb`8Y`][`hg	≠hYfbUh]cbU`Y`?ØW`Y

9]b`k`Yb][`Ui`»`Yf`U`V`XYf`GhUXh`Z]bXYb`G]Y`Ui`W`j`]Y`Y`
6Ui`Yfba`Àf`hYž`X]Y`Zf]gW`Y`i`bX`c`_U`Y`DfcXi`_hY`UbV]YhYbž`
XUfi`bhYf`C`Vghž` ; Ya`ØgYž`?`ÀgY`i`bX`fY[`]cbU`Y`K`i`fgkh`UfYb`"8]YgY`
A`Àf`hY`g]bX`dYfZ`_hY`C`fhYž`i`a`X]Y`c`_U`Y`b`5fca`Yb`ni`Yf`YVYb`
i`bX`j`]Y`Y]W`h`gc[`Uf`Y]b][`Y`Ni`hUhYb`ZØf`≠f`dYfg`Øb`]W`Yg`?`c`W`Yb`
ni`_Ui`ZYb`"9]b`6Ygi`W`Ui`ZY]bYa`'6Ui`Yfba`Uf`_h]gh`b]W`h`bi`f`
_i`]bUf]gW`VYfY]W`YfbXž`gc`bXYfb`Ui`W`Y]bY` ; Y`Y[`Yb`Y]hž`a`]h`
ZfYi`bX`]W`Yb`9]b`Y]a`]gW`Yb`ni`d`Ui`XYfb`i`bX`a`Y`f`ØVYf`X]Y`
VUX]gW`Y`?i`h`i`f`ni`YfZU`fYb"

J`Yf[`YggYb`G]Y`b]W`hž`Ui`W`X]Y`hfUX]h]cbY`Yb`VUX]gW`Yb`6]YfY`ni`
dfcV]YfYbž`X]Y`j`cb`c`_U`Y`b`6fUi`YfY]Yb`[`YVfUi`h`k`YfXYb`"C`V`Y]b`
Y`Y`g`@U[`YfV]Yf`c`XYf`Y]b`_f`À`ž][`Yg`8`i`b`_Y`V]Yf`X]Y`J`]Y`ZU`h]gh`
[`fc`»`i`bX`V]YhYh`ZØf`YXYb` ; YgW`a`UW`XUg`DUggYbXY`"9]b][`Y`XYf`
6fUi`YfY]Yb`j`YfUbghU`hYb`Ui`W`6]Yfj`Yf`_cghi`b[`Yb`i`bX` : Ø`fi`b[`Ybž`
VY]`XYbYb`G]Y`a`Y`f`ØVYf`XYb`6fUi`dfcnYgg`YfZU`fYb`_ØbbYb"

8]Y`_i`]bUf]gW`Y`GnYbY`]b`F`UghUhh]gh`YVYbX][`i`bX`j`]Y`Z`h][`i`bX`

V]YhYh'ZØf'YXYb': Y]bgWka YW_Yf'Yhk Ug"J cb'hfUX]h]cbY`Yb
; Yf]WkhYb'ØVYf'gØ»Y'? Øgh]W_Y]hYb'V]g'\]b'ni']bbcj Uh] Yb
?fYUh]cbYb' `VY]Y]bYa' `6Ygi Wk']b'X]YgYf'GhUXh'V`Y]VYb'_Y]bY
_i']bUf]gWkYb'K ØbgWkY'i bYfZØ`h"

9[U'ž'cV'G]Y']b'Y]bYa' [Ya Øh]WkYb'F YghUi fUbh'gdY]gYbž'Y]b
D]W_b]W_]b'Y]bYa' XYf'gWk ØbYb'DUf_g[Yb]Y» Yb'cXYf'X]Y'Øfh]WkYb
A Åf_hY'Yf_i bXYb'a ØWkhYbž'F UghUhh'\Uh'_i']bUf]gWk'j]Y`ni' `V]YhYb"
9g]gh'Y]bY'9]b'UXi b[ž'X]Y'; YgWka ÅW_Yf'i bX'HfUX]h]cbYb'XYf
FY[]cb'ni' YbhXYW_Yb'i bX'XUg'VUX]gWkY'@YVYbg[YZØ\`]b'j c`Yb
NØ[Yb'ni' [Yb]Y» Yb"

5 VYb hYi Yf']b'XYf'BUhi f'fi bX'i a' F UghUhh

F UghUhhž'VY_Ubbh'ZØf'gY]bY'\]ghcf]gWkY'5`hghUXh'i bX
a U'YghÅh]gWkYb'GWk'ØggYfž'V]YhYh'Ui Wk'UhYa VYfUi VYbXY
BUhi fYf'YVb]ggY']b'XYf'i a [YVi b["8]Y'GhUXh`Y]Y[h'Ua' F UbXY'XYg
GWk Ufnk U'XYg'i bX'V]YhYh'Y]bY'J]Y'nU\`j cb'A Ø[`]Wk_Y]hYbž'X]Y
`ÅbX']WkY'GWk Øb\Y]h'i bX'X]Y'nU\`fY]WkYb': fY]nY]hU_h]j]hÅhYb'ni
[Yb]Y» Yb"<]Yf'g]bX'Y]b][Y'XYf'VYghYb'5VYbhYi Yf']b'XYf'BUhi fž
X]Y'G]Y']b'i bX'i a' F UghUhh'Yf'YVYb'_ØbbYb"

9]b'VY']YVhYg'N]Y`ZØf'BUhi fžFYi bXY']gh'XYf'BUhi fdUf_
GWk Ufnk U'Xž'XYf'X]fY_h] cf'XYf'<Ui ghØf'j cb'F UghUhh'VY[]bbh'A]h
gY]bYb'h]YZb'K Å'XYfbž'gUbžhYb'<Ø[Y'b'i bX'_UfYb'6ÅWkYb']gh'XYf
DUf'_Y]b'9'XcfUXc'ZØf'K UbXYfYf'i bX'F UXZU\ fYf"8]Y[i h
a Uf_]YfhYb'K UbXYfk Y[Y'ZØ\ fYb'G]Y'Xi fWk'VY]bXfi W_YbXY
@UbXgWkUžhYb'i bX'`UggYb'G]Y'X]Y`c_U'Y': `cfU'i bX': Ui bU'\Ui hbU\
Yf'YVYb"

9]b'VYgcbXYfg'gWk ØbYf'K UbXYfk Y[`]gh'XYf'GWk Ufnk U'X!
K UbXYfk Y[ž'XYf'ØVYf'%'\$'\$'?'`ca YhYf`Ub[`]gh'i bX'g]Wk'Xi fWk
a U'Yf]gWkY'8 ØfZYf'i bX'k i bXYfgWk ØbY'K Å'XYf'gWk'Åb[Y'h'9bh'Ub[
XYg'K Y[Yg'Z]bXYb'G]Y'nU\`fY]WkY'c fhY'ni a'9bhgdUbbYb'i bX
D]W_b]W_Yb"5i » YfXYa' VYghY\hX]Y'A Ø[`]Wk_Y]hž'k]XY'H]YfY'ni
VYcVUWkhYbž'k]Y'VY]gd]Y`gk Y]gY'F Y\Y'cXYf'j YfgWk]YXYbY
Jc[Y'UfhYb"

: Øf'X]Y'Yb][Ybž'X]Y'Yg'']YVYf'gdcfh]W' a Ò[Ybž'g]b'X'X]Y
 : U\ffUXhci fYb']b'XYf' l a [YVi b['Y]b'Y'Ui g[YnY]W'bYh'Y'K U\''8]Y
 F Y[]cb' i a 'F UghUhh'V]YhYh'j]Y'Y' [i h'Ui g[YVUi h'Y'F UXk Y[Yž'X]Y
 gck c\`ZØf'5bZÅb[Yf'U'g'Ui W' ZØf'YfZU\ fYb'Y'F UXZU\ fYf' [YY][bYh
 g]b'X"9]b'VY']YVhYf'F UXk Y['ZØ\fh'Yb'h'Ub['XYg'F\Y]bgž'k c'G]Y'X]Y
 VYY]b'Xfi W_YbXY'5i gg]W'h'Ui ZXYb': 'i gg[Yb]Y» Yb'_ÒbbYb"

9]b'k Y]hYfYf'gdUbbYbXYf'C fh'ni a '9f_i bXYb']gh'X]Y'F UghUhhYf
 F \Y]b'Ui Y"8]YgY']Xm'']gW'Y'BUhi f'UbXgW'UZh'V]YhYh'b]W'h'bi f'Y]b'Y
 ZUbhUgh]gW'Y' ?i ']ggY'ZØf'Y]b'Yb'Yb'hdUbbhYb'HU['ja ' : fY]Ybž
 gcbXYfb'Ui W' nU\ fY]W'Y' A Ò['W' _Y]hYb'ZØf'5_hj]]hÅhYb'k]Y
 6]fXk UhW']b[ž'5b[Y'b'cXYf'Y]b'ZUW'bi f'GdUn]YfYb[Y\Yb"8Yf
 Ub[fYbnYbXY'F \Y]b'n]Y\h'ja 'Gca a Yf'j]Y'Y'6Ygi W'Yf'ZØf'Y]b'Yb
 YfZf]gW'YbXYb'GW'k]a a !'cXYf'6cchgUi ZYbh\U'h'Ub"

<]Yf'k YfZYb'k]f'Y]b'Yb'_i fnYb'6']W'_Ui ZY]b][Y'XYf'VYghYb'Ci hXccf!
 5_hj]]hÅhYb']b'XYf' l a [YVi b['j cb'F UghUhh

5_hj]]hÅh	; YY][bYh'ZØf	C fh
K UbXYfb	: Ua]]Ybž'DUUFY	GW'k Ufnk U'X
F UXZU\ fYb	Gdcfh]W'Y	F \Y]bfUXk Y[
6cchgZU\ fhYb	: fYi bXYž'DUUFY	F \Y]b
J c[Y'VYcVUW'hi b[B Uhi f']YV\UVYf	F UghUhhYf'F \Y]b'Ui Y

9]b'k Y]hYfYf'ZUbhUgh]gW'Yf'C fh'ZØf'BUhi f']YV\UVYf']gh'XYf'?i fdUf_
 F UghUhhž'XYf'Y]b'Y'\Yff']W'Y'5i gk U\''Ub'GdUn]Yf!'i bX'F UXk Y[Yb']b
 Y]b'Ya 'k i bXYfgW'Òb' [YghU'hYhYb'; UfhYb'V]YhYh'"<]Yf'_ÒbbYb'G]Y
 X]Y'Zf]gW'Y'@ Zi[Yb]Y» Ybž'k Å\ fYb'X'G]Y'X]Y'VYY]b'Xfi W_YbXY
 6chUb]_ 'VYk i bXYfb"J YfdUggYb'G]Y'b]W'h'X]Y'A Ò['W' _Y]hž'ja
 HYY\Ui g'ja 'DUf'_Y]b'Y'Yb'hdUbbYbXY'HYdUi gY'Y]b'ni 'Y[Yb"

: Øf'a Y\ f'5VYbhYi Yfk U[Yb']b'XYb'BUhi fdUf'_6]cX]j Yfg]hÅhgdUf_"
 8]YgY'YVYbX][Y' l a [YVi b['V]YhYh'nU\ fY]W'Y
 9bhXYW_Yfa Ò['W' _Y]hYbž'nk]gW'Yb'VchUb]gW'Yb'; ÅfhYb' i bX
 BUhi fgW'i m[YV]YhYb'"<]Yf'_ÒbbYb'G]Y'a Y\ f'ØVYf'c_UY
 DZUbnybUfhYb' i b'X'X]Y'6YXYi hi b['XYf'6]cX]j Yfg]hÅh'YfbYb' 'Y]b'Y
 dYfZY_hY' A]gW'i b['Ui g'GdU» 'i b'X'6]'Xi b['ZØf'X]Y' [Ubny': Ua]]Y"

D`UbYb`G]Y`\\YfZØf`Yhk Ug`NY]h`Y]bž`Yg`[]Vh`Ui Wk`fY[Y`a`À»][
[YZØ`fhY`Hci fYbž`X]Y`gdUbbYbXY`9]bV`]W_Y`]b`X]Y`BUhi f`i`bX
l`a`k`Y`h`j`Yfa`]hY`b`" <]Yf`YfZU`fYb`G]Y`b]Wk`h`bi`f`a`Y`f`ØVYf`X]Y
`c`_U`Y`:``c`f`U`i`b`X`:`Ui`b`Už`g`c`b`XYfb`Ui`Wk`ØVYf`X]Y`j`YfgWk`]YXYbYb
²`_c`g`m`g`h`Y`a`Y`ž`X]Y`X]YgYg`:`YV]Yh`Yf`U`h`Yb`"

9[U`ž`c`V`G]Y`Ui`Z`XYf`Gi`Wk`Y`b`UWk`Y`]bYa`Y`bhgdUbbYbXYb
GdUn]Yf[Ub[ž`Y]bYa`gdUbbYbXYb`K`UbXYfUVYbhYi`Yf`c`XYf`Y`]bYf
:`U`ff`UX`h`ci`f`a`]h`UhYa`VYfUi`VYbXYa`5i`gV`]W`_`g]bX`i`X]Y`BUhi`f
fi`bX`i`a`F`UghUhh`\\Uh`ZØf`YXYb`Yhk`Ug`ni`V]YhYb`"J`Yf[YggYb`G]Y
b]Wk`h`À`fY`?`Ua`YfU`a`]hni`bY`a`Ybž`XYbb`X]Y`b`UhØf`]Wk`Y`G`Wk`Øb`\\Y]h
X]YgYf`F`Y[]cb`]gh`UVgc`i`h`Z`c`h`c[Yb`i`b`X`k`]f`X`G]Y`]a`a`Yf`k`]YXYf`]b
]`f`Y`b`6`Ubb`n]Y`\\Yb`"

: Øf`k`Y]hYfY`≠`Z`c`f`a`U`h]cbYb`i`b`X`≠`gd]f`U`h]cb`ni`XYb
BUhi`f`UVYbhYi`Yfb`]b`XYf`:`Y[YbXž`_ØbbYb`G]Y`X]Y`c`ZZ]n]Y`Y`Y
K`YVgY]hY`j`cb`F`UghUhh`VYgi`Wk`Yb`"

?`i`h`i`f`Y`Y`Y`J`Yf`Ub`gh`U`h`i`b[Yb`i`b`X`:`Y`gh]j`U`g`]b
XYf`F`Y[]cb

F`UghUhh`i`b`X`gY]bY`l`a`[YVi`b[`g]bX`b]Wk`h`bi`f`ZØf`\\fY`\\]ghc`f]gWk`Yb
GY`\\Y`bgk`ØfX][_Y]hYb`i`b`X`U`b`X`g`Wk`U`Z`h]Wk`Y`G`Wk`Øb`\\Y]h`VY`_`U`bb`hž
gc`b`XYfb`Ui`Wk`ZØf`\\fY`Y`VYbX][Y`?`i`h`i`f`gnYbY`"8`Ug[Ubni`Y`\\f`
ØVYf`Z]bXYb`]b`XYf`GhUX`h`i`b`X`XYb`i`a`]Y[YbXYb`:`Ya`Y]bXYb
nU`\\fY]Wk`Y`J`Yf`Ub`gh`U`h`i`b[Yb`i`b`X`:`Y`gh]j`U`g`gh`U`h`ž`X]Y`9]b`\\Y]a`]gWk`Y
i`b`X`6`Ygi`Wk`Yf`[`Y]Wk`Yfa`U»`Yb`Ubni]Y`\\Yb`"

9]bYg`XYf`<`Ø`\\Y`di`b`_`hY`]a`i`À`\\f`]Wk`Yb`J`Yf`Ub`gh`U`h`i`b[g`_`U`Y`b`XYf`]gh
XUg`F`UghUhh`Yf`G`Wk`c`gg`Z`Y`ghž`k`Y`Wk`Yg`Y`XYg`\\f`]a`G`ca`a`Yf
gh`U`h`ž]b`XYh`"8]YgYg`:`Y`gh`V]Yh`Y`h`Y]b`Y`A`]gWk`i`b[`Ui`g`\\]ghc`f]gWk`Yb
8`Uf`ghY`i`b[Ybž`H`U`bn`Ui`Z`ZØ`f`i`b[Yb`i`b`X`a`i`g]_`U`]gWk`Yb`5`W`h`g`ž`X]Y
X]Y`5`ha`c`gd`\\`Á`fY`X`Y`g`%`,"`\\f`i`b`XYf`hg`k`]YXYf`Ui`Z`Y`V`Y`b`U`gg`Y`b`"
8]Y`HY]b`Y`\\a`Yf`_ØbbYb`g]Wk`Ui`Z`Y]b`Vi`bhYg`D`fc[f`Ua`a`Z`f`Yi`Ybž
XUg`l`bhYf`U`h`i`b[ZØf`X]Y[Ubni`:`Ua`]Y`V]Yh`Y`hž`XUfi`bhYf`.

- <]ghc`f]gWk`Y`A`Uf`_`h`gh`À`b`XY
- ?Øgh]Wk`_Y]hYb`Ui`g`XYf`F`Y[]cb`U`Y`b`:`Ugh`f`c`b`c`a`]Y

- 6Ø\bYbdYfZcfa UbWg'i bhYf'ZFY]Ya '<]a a Y`

9]b`k Y]hYfYg'<][\`][\h`]gh'XYf'F UghUhhYf`K Y]\bUWkhga Uf_hž'XYf'ja
 5Xj Ybh'X]Y`GhfU» Yb`XYf'5`hghUXh]b`Y]b`ZYgh]WXYg'@]WkhYfa YYf
 j Yfk UbXY`h"<]Yf`_Ubb`a Ub`b]Wkh`bi f`UbX[YZYfh][hY` ; YgWXYb_Y
 Yfk YfVYbž`gcbXYfb`Ui W`fY[]cbU`Y`@YW_YfY]Yb`[Yb]Y» Ybž
 k A`fYbX`a Ub`XYb`?`Ab[Yb`j cb`K Y]\bUWkhga i g]_`Ui gWkh"8]Y
 ZYgh]WXY`Gh]a a i b[`k]fX`Xi fW`X]Y`k i bXYfgW`ObY`?i`]ggY`XYf
 VUfcW_Yb`GhUXhUfW]hY`_hi f`bcW`j Yfgh`f_h`

B]Wkh`ni`j Yf[YggYb`]gh`XUg`b`hYfbUh]cbU`Yg`jnnZYgh]j U`ž`XUg`]b`XYf
 FY[Y`]a`gd`AhYb`Gca a Yf`ghUhhZ]bXYhi bX`jnn`]YV\UVYfb`Ui g`XYf
 [Ubnyb`fY[]cb`Y]bY`D`UhhZcfa`V]YhYhž`i a`]fYb`@]YV`]b[ga i g]_Yfb
 ni`_Ui gWXYb" <]Yf`hfYhYb`gck c`_Ui ZghfYVYbXY`?ØbghYf`U`g`Ui W
 YhUV`]YfhY`jnn[fØ» Yb`Ui Z`8]Y`j YfUbghU`hi b[Yb`Z]bXYb`Ub
 a Y`fYfYb`CfhYb`]b`f UghUhh`ghUhhž`XUfi bhYf`Ui W`XUg`\]ghcf]gWXY
 GhUXhh\YUhYfi bX`j YfgW]YXYbY`Ci hXccf!@cWWh]cbg"

9]b`k Y]hYfYg`VYXYi hYbXYg`9fY][b]g`]gh`XUg`F UghUhhYf`GhUXhZYghž
 XUg`bcfa U`Yfk Y]gY`ja` : fØ`gca a Yf[YZY]Yfh`k]fX"6Y`X]YgYa
 : Ygh`ghY`Yb`?i`]bUf]_ž`A i g]_i bX`nU`fY]WXY`A]ha UW`U_h]cbYb`ja
 JcfXYf[fi bX" @c`_U`Y`j YfY]bY`i bX` ; fi ddYb`df`AgYbh]YfYb`]\fY
 5fVY]hi bX`gW`UZZYb`gc`Y]b` ; Ya Y]bgW`UZhgYf`YVb]g"8]Yg`V]YhYh
 6Ygi WXYfb`b]Wkh`bi f`Y]bY` ; Y`Y[Yb`Y]hž`fY[]cbU`Y`GdYn]U`]h`AhYb`ni
 _cghYbž`gcbXYfb`Ui W`ž`X]Y` ; Ughž`fYi bXgW`UZh`XYf`F Ugh`hhYf`]b
 j c`Yb`NØ[Yb`ni`Yf`YVYb"

I a`Δ`bYb`Y]bYb`VYggYfYb` , VYfV`]W_ØVYf`X]Y`j YfgW]YXYbYb
 _i`hi fY`Yb`j YfUbghU`hi b[Yb`]b`f UghUhh`ni`[YVYbž`\UVYb`k]f`Y]bY
 Y]bZUWXY`HUVY`Y`YfghY`h

J YfUbghU`hi b[A cbUh	6YgcbXYf\Y]hYb
F UghUhhYf GW`c`ggZYgh	ž`]	<]ghcf]gWXY 8 UfghY`i b[Ybž A i g]_i bX _i`]bUf]gWXY 5b[YVchY
F UghUhhYf	8YnYa VYf	: Ygh]WXY`@]WkhYfž

J YfUbgH`hi b[K Y]\bUW`hga Uf_h	A c bUh	6YgcbXYf\Y]hYb fY[]cbU`Yg < UbXk Yf_`i bX`K Y]\ bUW`hg`YW_YfY]Yb
hYfbUh]cbU`Yg JnnZYgh]j U`	5i [i gh	5i ZghfYVYbXY`i bX VY_UbbhY Jnna i g]_Yf
F UghUhhYf`GhUXhZYgh	ž b]	?i `]bUf]_žA i g]_`i bX` ; Ya Y]bgW`UZhGU_h]j] h`hYb

8]Y`j]Y`Z`h[Yb`_i `hi fY`Yb`J YfUbgH`hi b[Yb`a UW`Yb`F UghUhh`ni
Y]bYa `YVYbX][Yb`Cfhž]b`XYa `HfUX]h]cb`i bX`A cXYfbY`k i bXYfVUf
a]hY]bUbXYf`j YfgW`a Y`nYb`"9[U`žcV`G]Y`Y]b` : Ub`j cb`A i g]_ž?i bgh
cXYf`_i `]bUf]gW`Yb`9f`YVb]ggYb`g]bXž` \]Yf`]gh`žf`YXYb`Yhk Ug
XUVY]"`

9]b`k Y]hYfYg`VYa Yf_Ybgk YfhYg`9fY][b]g`]gh`XYf`HU[`XYf`cZYbYb
H0f`]a `GhUXha i gYi a `F UghUhhž`XYf`]b`XYf`F Y[Y`]a ` : f0\`]b[
[YZY]Yfh`k]fX`<]Yf`\UVYb`X]Y`6Ygi W`Yf`X]Y`A 0[`]W`_Y]hž`X]Y
\]ghcf]gW`Yb`GUa a `i b[Yb`ni `Yf`_i bXYbž`Ub` : 0\fi b[Yb
hY]`ni bY`a Yb`i bX`a Y`f`0VYf`X]Y`GhUXh[YgW`]W`hY`ni `YfZU`fYb`
8]YgYg`9fY][b]g`Yfa 0[`]W`h`Ygž`X]Y`c`_U`Y`?i `hi f`]bhYbg]j `ni
Yf`YVYb`i bX`V]`XYh`Y]bYb`dYfZY`_hYb`F U`a Yb`žf` : Ua]]YbUi gZ0[Y
cXYf`GW`i ` _`UggYb`"

: 0f`X]Y`?i bgh]YV\UVYf`i bhYf`A bYb`[]Vh`Yg`fY[Y`a A»][
k YW`gY`bXY`?i bghUi gghY`i b[Yb`]b`XYf`?i bgh\U`Y`F UghUhh`"8]YgY
5i gghY`i b[Yb`d`f`A`gYb]h]YfYb`nY]h[Yb`0gg]gW`Y`?0bgh`Yf`i bX`V]YhYb
Y]bYb`9]bV`]W`_]b`X]Y`fY[]cbU`Y`i bX`0VYffY[]cbU`Y`?i bghgnYbY`"
J]Y`Y`XYf`J YfUbgH`hi b[Yb`g]bX`_cg]hYb`cg`i bX`UXYb`XUni `Y]bž`X]Y
_fYUh]j Yb`GY]hYb`XYf`GhUXh`ni `Yb`hXYW`_Yb`"

8]Y`?i `]ggY`j cb`F UghUhhž`a]h`]\fYb`gW`a U`Yb` : UggYb`i bX
VYY]bXfi W`_YbXYb`VUfcW`_Yb` : YV`Ai XYbž`j Yfgh`f`_h`XUg`9f`YVb]g
YXYf`J YfUbgH`hi b[`i bX`gW`UZZh`Y]bY`i bj Yf[Ygg`]W`Y
5ha cgd`ĀfY`"D`UbYb`G]Y`U`gc`A`fYb`6Ygi W`gcž`XUgg`G]Y`Y]bY`XYf
j]Y`Yb`J YfUbgH`hi b[Yb`Yf`YVYb`_0bbYb`"K Y]hYfY`hZcfa Uh]cbYb

ØVYf`X]Y`VYj cfghY\YbXYb`_i`hi fY`Yb`J YfUbgH`hi b[Yb`Z]bXYb`G]Y
Ui ZXYf`cZ]n]Y`Yb`K YVg]hY`j cb`F UghUhh`k k k "fUghUhh"XY`"

; Ubn`[`Y]Wž`ZØf`k Y`W`Y`5fhj cb`J YfUbgH`hi b[`G]Y`g]W
YbhgW`Y]XYbž`F UghUhhj Yfgdf]W`h`Y]bXfi W_gj c`Y`9f`YVb]ggY`i bX
X]Y`A Ò[`]W`_Y]hž`X]Y`Yfn`]W`Y` ; UghZFYi bXgW`UZh`XYf`GhUXh`ni
[Yb]Y»Yb`"GY\Yb`G]Y`g]W`XYb`J YfUbgH`hi b[g_U`YbXYf`Ubž`i a
XUg`6YghY`Ui g`≠fYa`5i ZYbh`U`h`YfUi gni`c`Yb`"

H]ddg`ZØf`Y]bYb`dYfZY`_hYb

K cW`YbYbXUi gZ`i [`bUW`F UghUhh

9]b`K cW`YbYbXY`]b`F UghUhhj Yfgdf]W`h`Y]bY`Yf`YVb]gfY]W`Y
A]gW`i b[`Ui`g` ; YgW`]W`hYž`?i`hi fi bX`B`Uhi`f`"8]YgY`W`Ufa`UbhY
GhUXh`]a`<YfnYb`6UXYb`!K ØfhY`a`VYf[g`U`h`ZØf`YXYb`Yhk`Ug`ni
V]YhYb`"I`a`g]W`Yfni`ghY`Ybž`XUgg`≠f`5i ZYbh`U`h`gck`c`\
Ub[YbY`a`U`g`Ui`W`i`bj`Yf[Ygg]W`k`]fXž`UVYb`k`]f`Y]b][`Y
bØh`]W`Y`H]ddg`ni`gUa`a`Yb[YghY`hž`X]Y`≠bYb`Y`ZYb`k`YfXYbž`≠f
K cW`YbYbXY`cdh]a`U`ni`[`YghU`hYb`"

%`5bfY]gY`i bX`A`cV]`]hAh

8]Y`5bfY]gY`bUW`F UghUhh]gh`i b`_ca`d`n]Yfh`"8]Y`GhUXh`]gh`gck`c`\
a`]h`XYa`5i`hc`U`g`Ui`W`a`]h`ÒZY`bh`]W`Yb`J Yf`Y`fga`]hhY`b`[`i`h
YffY]W`VUF`"8Yf`<Ui`dhV`U`b`c`Z`F UghUhhj`YfV]bXYh`X]Y`GhUXh`a`]h
k`]W`h][`Yb`N]Y`cfhYb`]b`8Yi`hgW`U`bX`i`bX`XYa`Ub[fYbnYbXYb
5i`g`UbX`"K`Ybb`G]Y`a`]h`XYa`Ni`[`UbY]gYbž`_ÒbbYb`G]Y`X]Y
5`hghUXh`VYe`i`Ya`ni`i`»`Yf`_i`bXYb`":`Øf`Y]bY`i`a`ZUggYbXY
9f`_i`bXi`b[`V]YhYh`g]W`Ui`W`XUg`: U`ffUX`Ubž`XUg`G]Y`]b
j`YfgW`]YXYbYb`J Yf`Y`\ghU]cbYb`a`]YhYb`_ÒbbYb`"

&`K`c`[`b`a`]h`XYf`i`bhYf`_i`bZh3

F UghUhh`V]YhYh`Y]bY`J`Y`nU`U`b`i`bhYf`_i`bZhga`Ò[`]W`_Y]hYbž`X]Y`ni
YXYa`6i`X[`Yh`dUggYb`"J`cb`[`Ya`Øh]W`Yb`6YX`/`6fYU`ZUghg`V]g`]\b
ni`_ca`ZcfhUV`Yb`<chY`g`]gh`U`Y`g`j`cf`U`bXYb`<]Yf`g]bX`Y]b`dUUF
Cdh]cbYb`.

- < c hY`fB Ua YŁ. '9]b'a cXYfbYg'< chY`ja ' < YfnYb'XYf'GhUXh a]h[i hYa 'Ni [Ub['ni 'GY\Ybgk ØfX][_Y]hYb"
- DYbg]cb'fB Ua YŁ. '9]bY'ZUa]Yb[YZØ\fhY'I bhYf_i bZha]h dYfgØb`]WYa 'GYfj]W"
- : Yf]Ybk c\bi b['fh"6" '5]fVbVŁ. ': Øf'X]Y'Yb][Ybž'X]Y a Y\ f'D`Um'i bX'I bUV\Àb[][_Y]h'k ØbgW'Yb"

' "HU[YgUi gZØ[Y'd`UbYb

Bi hnYb'G]Y'F UghUhh'U`g'5i g[Ub[gdi b_h'ZØf'9f_i bXi b[Yb'XYf I a [YVi b["'<]Yf'g]bX'Y]b][Y'c\ bYbgk YfhY'HU[YgUi gZØ[Y.

- : fY]Vi f[. '6i a a Y'b'G]Y'Xi fW'X]Y'5'hghUXhi bX'VYgi W'Yb G]Y'XUg'A ØbghYf"
- 6`UW_': cFYgh'; Yb]Y»Yb'G]Y'X]Y'Y]bn][Ufh][Y'B Uhi f'i bX'X]Y nU\`fY]W'Yb'K UbXYfk Y[Y"
- ? Uf'gfi \Y. '6Ygi W'Yb'G]Y'XUg'VYfØ\ a hY'GW'cgg'i bX'X]Y 6chUb]gW'Yb'; ÅfhYb"

(' '? i `]bUf]gW'Y'9bhXYW_i b[Yb

9]b'K cW'YbYbXUi gZi ['k ÅfY'b]W'h'_ca d`Yh'c\ bY'X]Y _i `]bUf]gW'Yb'<][\`][\hg'XYf'F Y[]cb"' ð'F UghUhh[]Vh'Yg'nU\`fY]W'Y F YghUi fUbhgž'X]Y'j cb'hfUX]h]cbY`Y'VUX]gW'Yf'? ØW'Y'V]g'\]b'ni]bhYfbUh]cbU'Yb'GdY]gYb'U`Yg'UbV]YhYb"DfcV]YfYb'G]Y'i bVYX]b[h X]Y'c_U'Yb'GdYn]U]hÅhYb'k]Y'X]Y'6UX]gW'Y': `Ua a _i W'Yb'cXYf XUg'GW'k Ufnk Å'XYf'?]fgW'hc'fhY"'<]Yf'g]bX'Y]b][Y'9a dZY\`i b[Yb.

- F YghUi fUb'h'fB Ua YŁ. ': Øf'hfUX]h]cbY`Y'VUX]gW'Y ; Yf]W'hY"
- 7UZÅ'fB Ua YŁ. '≠YU`ZØf'Y]bYb'gØ»Yb'Nk]gW'Ybghcdd"
- 6fUi \Ui g'fB Ua YŁ. 'DfcV]YfYb'G]Y'fY[]cbU'Y'6]YfY'i bX XYZh][Y'GdY]gYb"

) "'BYi Yg'YbhXYW_Yb' '@_U'Y'A Åf_hY'i bX'; YgW'ÅZhY

Bi hnYb'G]Y'X]Y'; Y'Y[Yb\Y]hž'X]Y'c_U'Yb'A Åf_hY'ni 'VYgi W'Ybž'X]Y cZiZf]gW'Y'DfcXi _hY'i bX'\UbX[YZYfh][hY'K UfYb'V]YhYb"'8Yf

K cWXYba Uf_h]b`F UghUhhZ]bXYh`YXYb`A]hkcW`i bX`GUa ghU[
ghUhh`i bX`]gh`Y]b`[fc» Ufh][Yf`C fhž`i a`fY[]cbU`Y`DfcXi`_hY`ni
_Ui ZYb`i bX`XUg`c_U`Y`@YVYb`ni`Yf`YVYb`"6i a a Y`b`G]Y`Ui W
Xi fW`X]Y`W Ufa UbhYb` ; YgW`ÀZhY`]b`XYf`5`hghUXhž`k c`G]Y
Gci j Yb]fg`i bX` ; YgWXYb_Y`Z]bXYb`_ÒbbYb"

* " J YfUbgHU`hi b[Yb`i bX`B UW`h`YVYb

F UghUhh`Uh`Y]b`YV`UZhYg`B UW`h`YVYb`i bX`V]YhYh`nU`fY]WXY
J YfUbgHU`hi b[Ybž`X]Y`k`À`fYbX`XYg`X`fYg`ghUhhZ]bXYb`"5W`hYb`G]Y
XUfUi Zž`c_U`Y`9j Ybhg`cXYf` ; Ygh]j U`g`ni`VYgi WXYbž`X]Y
a`Ò[`]WXYfk`Y]gY`k`À`fYbX``À`fYg`5i ZYbh`U`hg`ghUhhZ]bXYb`"b`XYf
GhUXh`_ÒbbYb`G]Y`Ui W`j`YfgW`]YXYbY`6Ufg`i bX`7`i Vg`YbhXYW_Ybž
X]Y`j`cb`[Ya`Øh]W`V]g`YV`UZh`fY]WXYb"

+ " `bZcfa]YfYb`G]Y`g]W`ØVYf`c_U`Y`5hhfU_h]cbYb

6Yj cf`G]Y`À`fY`F Y]gY`UbhfYhYbž`k YfZYb`G]Y`Y]bYb`6`]W`_Ui ZX]Y
cZ]n]Y`Y`K`YVg]hY`j`cb`F UghUhhž`i a`g]W`ØVYf`U`_hi`Y`Y
J YfUbgHU`hi b[Yb`i bX`GY`Yb`gk`ØfX][`_Y]hYb`ni`]bZcfa]YfYb`"J`cb
`]ghcf]gWXYb`Gh`hYb`V]g`]b`ni`a`cXYfbYb`5hhfU_h]cbYbž`Yg`[]Vh
]a`a`Yf`Yhk`Ug`BYi`Yg`ni`YbhXYW_Yb`"J]Y`Y`A`i`gYYb`V]YhYb`Ui`W
gdYn]Y`Y` ; Ø`fi b[Yb`i bX`J YfUbgHU`hi b[Ybž`X]Y`À`fYb`6Ygi W
VYfY]WXYfb`_ÒbbYb"

A]h`X]YgYb`H]ddg`g]bX`G]Y`VYghYbg`[YfØghYh`ZØf`Y]b
i`bj`Yf[Ygg`]WXYg`K`cWXYbYbXY`]b`F UghUhh` ; Yb]Y»Yb`G]Y`X]Y
J]Y`gY]h][`_Y]h`X]YgYf`GhUXh`i bX`UggYb`G]Y`g]W`j`cb`]fYf
GW`Öb`Y]h`i bX`]fYa`7`Ufa`Y`j`YfnUi`VYfb`°

8YhU]`g

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