

9]bV`]W\_Y`]b`X]Y`GYdhYa VYf!< ][ \`][ \ hg  
XYf`5F 8 `A YX]Uh\Y\_`]b`6UXYb!6UXYb

9bhXYW\_Yb`G]Y`X]Y`GYdhYa VYf!< ][ \`][ \ hg`XYf`5F 8  
A YX]Uh\Y\_žj cb`dUW\_YbXYb`8c\_i g`ØVYf`A i g]\_`V]g`\]b`ni  
\]ghcf]gW\_XYb`F`ØW\_V`]W\_Yb``9f`YVYb`G]Y`X]Y`; YgW\_X]hYb`j`cb  
8Uj ]Xž`XYf`gY]bYb`HfUi a `U`g`A i g]\_Yf`j`YfZc`[ hž`i bX`Yf\U`hYb  
G]Y`9]bV`]W\_Y`]b`XUg`@YVYb`j`cb`Df]bW`<Uffmi bX`XYa `fchYb  
?U]gYf`A Uc``čZcfa ]YfYb`G]Y`g]W\_X`ØVYf`UVk YW\_X`g`i b[ gfY]W\_X  
: cfa UhY`k ]Y` G\Y`7\YZ `i bX` Ni \Ui gY!Hci f `a ]h`J UbYggU  
A U]``J YfdUggYb`G]Y`b]W\_X`h`X]Y`gY`gdUbbYbXYb`č\U`hYž`UV  
gcZcfhj YfZØ[ VUf°



J ]Y`ZU`h`XYf`GhfYUa ]b[ !5b[ YVchY`]a  
GYdhYa VYf`&\$&(

⇒ `GYdhYa VYf`&\$&( `XUfZ]g]W\_X`XUg`Di V`]\_i a `Ui ZY]bY`Ui ZFY[ YbXY  
DU`YhhY`Ub`8c\_i a YbhUh]cbYb`i bX`I bhYf\U`hi b[ `]a `XYi hgW\_XYb  
: YfbgY\Yb`ZFYi Yb``8]Y`5F 8 `A YX]Uh\Y\_žX]Y`5F 8 `5i X]ch\Y\_`i bX

fY`Yj UbhY`GcWjU!A YX]U! ? UbÅ`Y`V]YhYb`j`j]Y`ZÅ`h][ Y`ϕ\U`hYž`X]Y`XUg  
]bX]j`]Xi Y`Y`i`bX`[ Ya`Y]bgWÅ UZh]WÅ Y`@YVYb`VYfY]WÅ Yfb`\_ÖbbYb"

9]b`6`]W\_` \ ]bhYf`X]Y`? i` `]ggYb`XYg  
A i g]\_YfXUgY]bg

8]Y`8c\_i !GYf]Y` 9WÅ hYg`@YVYb` `8Uj Yg`GhUfh`U`g`A i g]\_Yf ž  
X]Y`UV`XYa` &, "5i [ i gh]b`XYf`5F8`A YX]Uh\Y`\_ni`gY\Yb`]ghž`ghY`h  
X]Y` : fU[ Y`bUWÅ`XYa`DfY]g`XYg`HfUi`a`g`j`ca`A i g]\_Yf`YVYb`"8Uj ]Xž  
Y]b` ( !Å\ f][ Yfž`XYf`U\ fY`Ub[ `]b`XYf`ϕXi ghf]Y`[ YUfVY]hYh`Uhž  
VYgWÅ`]Y» hž`gY]bY`g]WÅ YfY`5bghY`i`b[ ` \ ]bhYf`g]WÅ`ni` `UggYbž`i`a  
gY]bY`@Y]XYbgWÅ UZh`ni`f`6Yfi`Zi`b[ `ni`a`UWÅ Yb`"8]YgY`9bhgWÅ Y]Xi`b[  
Vf]b[ `h`b]WÅ`h`bi`f`[ fc» Y`< YfUi`gZcfXYfi`b[ Yb`a`]h`g]WÅ`ž`gcb`XYfb  
YfÖZb`Yh`Ui`WÅ`9]bV`]W\_Y`]b`X]Y`[ YgY`gWÅ UZh]WÅ Yb`9fk`Ufhi`b[ Ybž  
X]Y`j`]Y`Y`A`YbgWÅ Yb`]a`6Yfi`Zg`YVYb`VY`UghYb`"8]Y`Ni`gWÅ`Ui`Yf  
Yf\U`hYb`Y]b`Y]bXf]b[ `]WÅ Yg`6`X`j`cb`XYf`]bbYfYb`NYff]ggYb\Y]h  
nk`]gWÅ Yb`G]WÅ Yf\Y]hi`bX`XYa`GhfYVYb`bUWÅ`9fZØ`i`b[ "

8]Y`[ YgY`gWÅ UZh`]WÅ Y`F`Y`Yj`Ubn`VYfØ`a`hYf  
DYfgÖb`]WÅ \_Y]hYb

9]bY`k`Y]hYfY`gY\Ybgk`YfhY`DfcXi`\_h]cb`]gh` < Uffmi`  
GWÅ ]W\_gU`g`U\ fY`Y]bYg`Df]bnYb` ž`X]Y`UV`XYa` - "GYdhYa`VYf`]b  
XYf`5F8`A YX]Uh\Y`\_VYfY]h`ghY`h`"8]YgY`8c\_i !GYf]Y`i`bhYfgi`WÅ`h`X]Y  
6]c[ fUZ]Y`j`cb`Df]bW`< Uffmi`bX`XYb`< YfUi`gZcfXYfi`b[ Ybž`X]Y`Yf  
U`g`A`h[ `]YX`Y]bYf`XYf`VY`\_Ubb`hY`ghYb` : Ua`]Y]b`XYf`K`Y`h`Yf`YVh`Uh`  
DUfU`Y`X`Uni`k`]fX`X]Y` : fU[ Y`VY`U`b`XY`hž`k`]Y`XUg`@YVYb`]b`XYf  
fcm`U`Yb`6`UgY`a`]h`XYb`5bgdfØ`WÅ Yb`XYf`2`ZZYbh]WÅ \_Y]h`\_c`X]Yfh  
i`bX`k`Y`WÅ Y`F`c`Y`XUg`GhfYVYb`bUWÅ`i`bUV`Å`b[ ][\_Y]h`]b`gY]bYa  
@YVYb`gd]Y`h`"8]YgY`8c\_i`[ Yk`Å`f`h`b]WÅ`h`bi`f`Y]bYb`dYfgÖb`]WÅ Yb  
9]bV`]W\_`]b`gY]bY` ; YgWÅ ]WÅ`hY`ž`gcb`XYfb`k`]fZh`Ui`WÅ`Y]bYb`6`]W\_`Ui`Z  
X]Y`F`Y`Yj`Ubn`j`cb`ZJa`]`Å`fYb`i`bX`[ YgY`gWÅ UZh]WÅ Yb`9fk`Ufhi`b[ Yb  
]b`XYf`\Yi`h][ Yb`NY]h"

: fUi`Ybdck`Yf`]b`XYf` ; Ughfcbca`]Y`i`bX`]a  
Gdcfh

9]b`VYa Yf\_Ybgk YfhYf'6Y]hfU[ `ni f'; `Y]WghY`i b[ `XYf  
; YgW`YW`hYf`]gh`X]Y`8c\_i` ` G\Y`7\YZ ž`X]Y`UV`XYa`%&"  
GYdhYa VYf`Ui g[ YghfU\`h`k ]fX"G]Y`VY[ `Y]hYh`X]Y`ÒghYffY]W]gWY  
?cWk Y`ha Y]ghYf]b`5[ bYg`?UffUgW`Ui Z`\fYa`K Y[ `]b`XYf`cZh  
a`Àbb`]W`Xca`]b]YfhYb`GhYfbY\_ØWY" ÆfY`F Y]gY`ghY\h`ZØf`Y]bYb  
bchk YbX][ Yb`K UbXY`]b`XYf"; Ughfcbca`]Y`i bX`\]bhYfZfU[ h`X]Y  
ghfi`\_hi fY`Yb`<ØfXYbž`a`]h`XYbYb`:`fUi Yb`\Ài Z][`\_cbZfcbh]Yfh`g]bX"  
9g`\UbXY`h`g]W`\]YfVY]`i a`Y]bY`Yfa`i h][ YbXY`9fnÀ\`i b[ ž`X]Y`X]Y  
<YfUi`gZcfXYfi b[ Yb`i bX`9fZc`[ Y`Y]bYf`:`fUi`]b`Y]bYa`hfUX]h]cbY`  
a`Àbb`]W`Yb`i a`ZY`X`j YfXYi h]W`h"

; `Y]W`nY]h][`nY][`h` 6UW`\_hc`h`Y`F`c`c`hg.`F`Y[ ]bU`<U`a`]W` `8]Y  
E`i`YYb`]a`F`]b[ `ž`YVYbZU`g`UV`XYa`%&"GYdhYa VYf`]b`XYf`5F`8  
A`YX]Uh\Y\_ž`Y]bXfi`W\_gj`c`ž`k`]Y`Gdcfh`Yf]bbYb`k`]Y`F`Y[ ]bU`<U`a`]W  
VU\`bVfYW`YbXY`9fZc`[ Y`Yfn]Y`Yb`\_ØbbYb" Æf`7ca`YVUW`]a  
6cl`f]b[ `ni`gUa`a`Yb`a`]h`XYa`Y\`Ya`U][ Yb`A`cXYfUhc`f`GhY`ZUb`F`UUV  
nY][`hž`XUgg`Yg`k`]W`h][`]ghž`Ui`W`]a`Gdcfh`XYb`D`Um`ZØf`:`fUi`Yb`ni  
j`YfhY]X][`Yb"

< ]ghc`f]gW`Y`F`YZ`YI`]cb`i`bX`U`\_hi`Y`Y`F`Y`Yj`Ub`n

9]b`k`Y]hYfYf`VYXYi`hYbXYf`5gdY`\_h`XYf`GYdhYa`VYf!<][`\][`\hg`]gh  
X]Y`8c\_i` `A`Uc` `8Yf`f`chY`?`U]gYf`ž`X]Y`Ua`%+`"GYdhYa`VYf  
j`YfZØ[VUf`gY]b`k`]fX"8]YgY`GYf]Y`h`Ya`Uh]g]Yfh`X]Y`\_ca`d`YI`Y`F`c`Y  
A`Ucg`]b`XYf`W]bYg]gW`Yb`:`YgW`]W`hY`i`bX`X]Y`XUa`]h  
j`YfVi`bXYbYb`[ YgY`gW`UZh]W`Yb`:`c`[ Yb" Æ`5bVYhfUW`h`XYf  
[ Y[ Ybk`Àfh][ Yb`dc`]h]gW`Yb`G]hi`Uh]cb`]b`7\]bU`i`bhYf  
GhUUhgdf`Àg]XYbh`L`]bd]b[ `j`Yf`\_bØdZh`X]Y`8c\_i` \]ghc`f]gW`Y  
9fY][`b]ggY`a`]h`U`\_hi`Y`Yb`:`fU[ YghY`i`b[ Yb`i`bX`fY[`h`ni`f`F`YZ`YI`]cb  
ØVYf`J`Yf[ Ub[ Yb\Y]hgVYk`À`h][`i`b[ `i`bX`bUh]cbU`Y`Æ`Yb]h`h`h`Ub"

ÆbhYfU`\_h]j`Yg`@YfbYb`i`bX`9b[ U[ Ya`Ybh`a`]h  
XYf`:`YgY`gW`UZh

: Øf`ÆhYfYgg]YfhY`Ub`[ YgY`gW`UZh]W`Yb`H\`Ya`Yb`V]YhYh`X]Y  
GYbXi`b[ `GK`F`5`\_hi`Y` ` `\*`\$`:`fUX`ž`X]Y`UV`XYa`%&"  
GYdhYa`VYf`Ui`Z`M`ci`hi`VY`Ui`g[ YghfU\`h`k`]fXž`Y]bYb`k`Yfh`c`Yb

Ni [ Ub[ 'ni 'dYfgOb`]WYb'; YgW]WYhYb'j cb'A YbgWYbž'X]Y`]b  
ghÀXh]gWYb'gck ]Y`ÀbX`WYb'FY[ ]cbYb`YVYb"8]Y`<cghg'@Ycb]Y  
A UXYfghY]b`i bX'A Ufj ]b`BYi a Ubb`Vf]b[ Yb`Y]bY`Y]bn][ Ufh][ Y  
DYfgdY\_h]j Y`Ui Z[ YgY`gWUZhgd`c]h]gWY`<YfUi gZcfXYfi b[ Ybž'X]Y  
cZh'b]WYh[ Y\Òfhk YfXYbž'i bX`nY][ Ybž'k ]Y`XUg'@YVYb`]b  
i bhYfgW]YX`WYb'FY[ ]cbYb'8Yi hgW`UbXg`]gh"

## J YfUbghU`hi b[ Ybž'X]Y`VY[ Y]ghYfb

5V[ Yfi bXYhk ]fX`XUg`GhfYUa ]b[ !5b[ YVchi]a `GYdhYa VYf`Xi fW`  
Ni \Ui gY!Hci f` `J UbYggU`A U`]b`7cbWf h ž'X]Y`UV`XYa `&%"  
GYdhYa VYf`ni `gY\Yb`gY]b`k ]fX"8]YgYg`?cbnYfhž'XUg`X]Y  
5ha cgd\ÀfY`Y]bYg`@] Y!9j Ybhg`]bg`K c\bn]a a Yf`Vf]b[ hž`V]YhYh  
XYb`Ni gWUi Yfb`X]Y`A Ò[ `]W\_Y]hž'X]Y`9bhk ]W`i b[ `Y]bYg`XYf  
YfZc`[ fY]WghYb'; Yg]WYhYf`XYf`XYi hgWYb`A i g]\_gnYbY`ni `Yf`YVYb  
i bX`g]W`j cb`]fYf`9bYf[ ]Y`UbghYW\_Yb`ni `UggYb"

## : Un]h'i bX`9]b`UXi b[ `ni f`9bhXYW\_i b[

8]Y`GhfYUa ]b[ !H]ddg`ZØf`GYdhYa VYf`&\$&( `g]bX`b]WYh`bi f`Y]bY  
9]b`UXi b[ `ni f`i bhYf\U`hi b[ ž`gcbXYfb`Ui W`ni f`FYZYI ]cb`ØVYf  
k ]WYh[ Y`[ YgY`gWUZh]WY`H\Ya Yb"CV`Yg`i a `dYfgOb`]WY  
HfÀi a Yž`\]ghcf]gWY`5i ZUfVY]hi b[ `cXYf`X]Y`GhÀf\_i b[ `j cb`i: fUi Yb  
]b`i bhYfgW]YX`]WYb`6Yfi ZYb`[ Y\hž'X]YgYg`Dfc[ fUa a `V]YhYh  
9]bnY`bYb`i bX`; Ya Y]bgWUZhYb`Y]bY`k Yfhj c`Y`A Ò[ `]W\_Y]h`ni f  
5i gY]bUbXYfgYhni b[ "5VcbbYbhYb`gc`hYb`X]Y`D`UhZcfa Yb  
bi hnYbž'i a `X]Y`ZUW`hYb`fY]WY`A YX]Yb`UbXgWUZh`ni `Yf\_i bXYb  
i bX`XUfUi g`gd]fUh]cb`ZØf`XUg`Y][ YbY`@YVYb`ni `gW`ÒdZYb"

: Øf`XYhU]`YfhY`Zcfa Uh]cbYb`ni `XYb`Dfc[ fUa a ]b\U`hYb  
VYgi WYb`G]Y`V]hY`X]Y`K YVgY]hY. **GK F`GhfYUa ]b[ !H]ddg"**

6Ygi W\Yb`G]Y`i bg`Ui Z.`a Y]b!VYf`]b"bYh