

# F Unn]U`]b`K Y\`Y]XYb.`Dc`]nY]`XYW\_h ]`Y[ U`Y` ; YgW\`ÀZhY`Ui Z

⇒ `? UggY`Yf`GhUXhhY]`K Y\`Y]XYb`ZØ\ fhYb`%' \$`Dc`]n]ghYb  
8i fW\gi W\i b[ Yb`[ Y[ Yb`Y]bYb`(\*!`À\f][ Yb`k Y[ Yb  
a i ha U»`]W\Yf`\_f]a ]bY`Yf`A UW\YbgW\UZhYb`Xi fW\`

5a`8cbbYfghU[ žXYb`\*"GYdhYa VYf`&\$&( žYf`YVhY`XYf`GhUXhhY]`  
K Y\`Y]XYb`]b`? UggY`Y]bY`a Ugg]j Y`Dc`]nY]dfÀgYbn"9]b  
\_ccfX]b]YfhYf` ; fc»Y]bgUhm`VfUW\hY`]bg[ YgUa`h`Yhk U`%' \$  
9]bgUhm`fÀZhY`XYf`Dc`]nY]ž`GhYi YfZU\`bXi b[ ž`gck ]Y`6YUa`hY`XYg  
CfXbi b[ gUa`hYg`i bX`XYf`6Ui Ui Zg]W\h`Ub`ni gUa`a Yb`&+`CV`Y`\_hY  
]b`g]YVYb`6i bXYg`ÀbXYfb"⇒a`A ]hhY`di b`h`X]YgYf`F Unn]U`ghUbXYb  
X]Y`5\_hj] ]hÀhYb`Y]bYg`(\*!`À\f][ Yb`A UbbYg`Ui`g`? UggY`ž`XYf`]a  
J YfXUW\h`ghY\`hž]`Y[ U`Y` ; YgW\`ÀZhY`ni`VYhfY]VYb`"

8]Y`Dc`]nY]`i bX`X]Y`GhUUhgUb`k U`hgW\`UZh`? UggY`[ UVYb`]b`Y]bYf  
DfYggYf`\_Àfi b[ `VY`\_Ubbhž`XUgg`]a`F U\`a Yb`XYf`9fa ]hh`i b[ Yb  
Y]bY`J]Y`nU\`j cb`CV`Y`\_hYbž`XUfi bhYf`df]j UhY`K c\`b\`Ài gYfž  
; YgW\`ÀZhgf`Ài a Y`i bX`gc[ Uf`Y]bY`5fnhdfUI ]gž`Xi fW\gi W\hYb  
k i fXYb"8]Y`9fa ]hh`i b[ Yb`[ Y`hYb`U`g`i a ZUb[ fY]W\`i bX`\_ca`d`Yi ž  
XU`g]Y`j YfgW\]YXYbY`HUhj`cfk ØfZY`k ]Y`VUbXYba`À»][ Y  
I f`i bXYbZ`gW\i b[ `i bX`6Yhfi [ `i a ZUggYb`"

⇒`Y[ U`Yg`6cfXY``]a` : c`\_i`g`XYf`9fa ]hh`i b[ Yb

8 Ug`nYbhfU`Y`9`Ya Yb`h`XYf`J`cfk ØfZY`]gh`XUg`Ub[ YV`]W\Y`6YhfY]VYb  
Y]bYg`6cfXY``g`]b`XYf`? UbhghfU» Y`%"8]YgYg`6cfXY``k i fXY`Xcfh  
i bhYf`XYa`8YW`\_bUa Yb` <cghYggYb\Ui g`VYk`cfVYb`i bX`Vch`X]Y  
8]Ybgh`Y]ghi b[ Yb`j`cb` : fUi Yb`Ub"8]Y`9fhf`À[ Y`Ui`g`X]YgYb  
5\_hj] ]hÀhYb`gc`Yb`ni`f` : ]bUbn]Yfi b[ `j`cb`\cW\k`Yfh][ Yb  
: U\`fnYi [ Yb`j`Yfk`YbXYh`k`cfXYb`gY]bž`X]Y`XYf`J`YfX`W\h][ Y

j Yfa ]YhYh\UVYb`gc`"9]b`k Y]hYfYf`gWk Yfk ]Y[ YbXYf`J cfk i fZ]gh  
X]Y`9ff]Wk hi b[ `Y]bYf`A DI !6YfUhi b[ gghY`Y`fA YX]n]b]gW!  
DgmWk c`c [ ]gWk Y`i bhYfgi Wk i b[ ěž`X]Y`Z0f`X]Y`a Ub]di `Uh]j Y  
9fghY`i b[ `j cb` ; i hUWk hYb`ni f`K ]YXYfYf`Ub[ i b[ `Ybhc[ Yb  
[ Y\UVhYf` : U\ fYf`Ui Vb]ggY` [ Ybi hnh`k i fXY" < ]YfVY]`ghY\Yb`Ui Wk  
Y]b`Ub[ Y\YbXYf`5fnhi bX`Y]b`DgmWk c`c [ Y`i bhYf`J YfXUWk hž]b`X]Y  
[ YZÀ`gWk hYb` ; i hUWk hYb` ]bj c`j ]Yfh[ Yk YgYb`ni `gY]b"

6YgcbXYfg`Vf]gUbh]ghž`XUgg` [ Y[ Yb`XYb`<Ui dhVYgWk i `X][ hYb  
VYfY]hg`k Y[ Yb` [ YZÀ`gWk hYf`=a dZVYgWk Y]b][ i b[ Yb`Yfa ]hY`h`k i fXY"  
9]b`5ffYghVYgWk`i gg`j cb`" ) &"\$\$\$`9i fc`ghY\h`bcWk`cZYb`i bX  
a i gg`j c`ghfYW`h`k YfXYb`"8]Y`6Y\0fXYb`Yf`cZYb`g]Wk`j cb`XYf  
i a ZUggYbXYb`8i fWk gi Wk i b[ gU`h]cb`k ]Wk h[ Y`6Yk Y]ga ]hY`"

? ccfX]b]YfhY`5\_h]cb`ni f`6Y\_Àa dZi b[ `j cb  
? f]a ]bU`]hÀh

8]Y`F Unn]Yb`ZUbXYb`b]Wk h`bi f`]b`? UggY`ž`gcbXYfb`Ui Wk`]b  
a Y\ fYfYb`k Y]hYfYb`6i bXYg`ÀbXYfb`ghUhhž`XUfi bhYf`<YggYbž  
6UXYb!K 0fhY a VYf[ ž`6UmYfbž`B]YXYfgUWk gYbž`BcfXf`Y]b!  
K YghZU`Ybž`GUWk gYb`i bX`H\0f]b[ Yb`"8]Y`9fa ]hYf`\_cbbhYb`Ub`XYb  
j YfgWk]YXYbYb`GWk Ui d`ÀhYb`nU\`fY]Wk Y`8UhYbhfÀ[ Yf`i bX  
6Yk Y]ga ]hY`g]Wk YfghY`Ybž`X]Y`bi b`Ui g[ Yk YfhYh`k YfXYb`"8]YgY  
5i gk Yfhi b[ Yb`\_cbnYbhf]YfYb`g]Wk`b]Wk h`bi f`Ui ZX]Y  
a i ha U»`]Wk Yb`GhfUZhUhYbž`gcbXYfb`Ui Wk`Ui Z`dchYbn]Y`Y  
; Y`X`\_cbhYb`i bX`? fmdhck À\fi b[ Yb`XYf`6YgWk i `X][ hYb"

8]Y`5\_h]cbYb`XYf`Dc`]nY]i bX`GhUUhgUbk U`hgWk UZh`ghY\Yb`]a  
?cbhYI h`k UWk gYbXYf`6Ya 0\i b[ Ybž`\_f]a ]bY`Y`Ghfi \_hi fYb`i bX  
i bYf`Ui VhY` ; YgWk ÀZhY`]b`8Yi hgWk`UbX`Ui Zni XYW`Yb`i bX`ni  
i bhYfV]bXYb`"8]Y`9fa ]h`i b[ Yb`g]bX`bcWk`b]Wk h`UV[ YgWk`cggYbž  
i bX`X]Y`6Y\0fXYb`\UVYb`Ub[ Y\_0bX][ hž`X]Y`GUWk Y`k Y]hYf`]bhYbg]j  
ni `j YfZc`[ Yb"

8]Y`F Unn]U`]b`? UggY`!K Y`\Y]XYb`]gh`Y]b`k Y]hYfYg`6Y]gd]Y`Z0f`X]Y  
Ub\U`hYbXYb`5bgfhYb[ i b[ Yb`j cb`Dc`]nY]i bX`ž`gh]nž` [ Y[ Yb  
]`Y[ U`Y` ; YgWk ÀZhY`i bX`\_f]a ]bY`Y`BYhnk Yf`\_Y`j cfni [ Y\Yb`"A ]h`XYb  
U`hi Y`Yb`9bhk ]W`i b[ Yb`k ]fX`XYi h]Wk ž`XUgg`X]Y`6Y\0fXYb

\_ca dfca ]gg`cg' ]b' ]\fYa ' ?Ua dZ' [ Y[ Yb' J YfVfYW\Yb' i bX  
A ]ggVfUi W\ 'j cb `Y[ U`Yb' Ghfi \_hi fYb' j cf[ Y\Yb"

8]Y`² ZZYbh` ]W\ \_Y]h'k UfhYh' [ YgdUbbh'Ui Z'k Y]hYfY' ðZcfa Uh]cbYb  
i bX' GhY` i b[ bU\ a Yb' j cbgY]hYb' XYf' 9fa ]h' i b[ gVY\ ÒfXYbž' X]Y' ZØf  
XYb' B UW\ a ]hU[ 'Ub[ Y\_ØbX][ h'k i fXYb" '9g' V`Y]Vh'UVni k UfhYbž  
k Y`W\ Y'ni gÅh` ]W\ Yb' 8YhU]`g'ni f'5i gk Y]h' i b[ 'XYf' 9fa ]h' i b[ Yb  
VY\_Ubbh' [ Y[ YVYb' k YfXYb"

8YhU]`g

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