

# Gdcfh`Yf!9\fi b[ `]b`8Y`a Yb\cfgh. `K Yf k ]fX `B UWx Zc`[ Yf`XYf`GhUfg3

5a `` \$"%\$`Y\fh`8Y`a Yb\cfgh`gY]bY`Gdcfh`Yf``J cfgWx`À[ Y  
g]bX`k ]`\_ca a Ybž`5Vgh]a a i b[ `ZØf`X]Y`Gdcfh`Yfk U\``]a  
: fØ\`U\`f`&\$&) "

8Y`a Yb\cfghž`8Yi hgWx`UbX`!`ϑ`8Y`a Yb\cfgh`ghY\`h`X]Y  
Gdcfh`YfY\fi b[ `j cf`XYf`HØf`9]bY`ž fm`Ui g`Dc`h]\_Yfbž  
J Yfk U`hi b[ gj Yfhf`YhYfbž`GhUX`hgdcfhVi bX`i bX`∞i fbU`]ghYb`g]Wx`hYh  
bi b`X]Y`Y]b[ Y[ Ub[ YbYb`J cfgWx`À[ Y`ZØf`\YfUi gfU[ YbXY`gdcfh`]WxY  
@Y]ghi b[ Yb``8]YgY`k YfXYb`bUWx`XYf` F]Wx`h`]b]Y`ZØf`X]Y`9\fi b[  
j YfX]Yb`hYf`Gdcfh`Yf]bbYb`i bX`Gdcfh`Yf` VYk YfhY`hž`k cVY`]Ui Wx  
Ui »Yf[ Yk Ø\`b`]WxY`@Y]ghi b[ Yb`j cb`X]YgYf`Bcfa`UVk Y]WxYb  
\_ØbbYb``8]Y`ž fm`k ]fX`Y]b[ ]Y`9a dZY\`i b[ Yb`Ub`XYb`dc`h]gWxYb  
: UWxUi ggWxi gg`ZØf`?i`hi fi bX`Gdcfh`Ui ggd`fYWxYbž`VYj cf`XYf  
J Yfk U`hi b[ gUi ggWxi gg`ØVYf`X]Y`YbX[ Ø`h][ Y`Ni`Uggi b[ `ni f  
9\fi b[ `YbhgWxY]Xyh"

⇒a`F`U\`a Yb`XYf`Gdcfh`YfY\fi b[ `&\$&) `k YfXYb`X]Y`Gdcfh`Yf]bž`XYf  
Gdcfh`Yf`i bX`X]Y`A`UbbgWx`UZh`XYg`ϑ\`fYg[ Y\_Øfh``5i`g`U``Yb  
9]bgYbXi b[ Yb`k YfXYb`Y`?UhY[ cf]Y`XfY]`Bca`]b]YfhYb`ZØf`X]Y`K`U\`  
Ui g[ Yk`À\`hž`i bX`X]Y`8Y`a Yb\cfghYf`\_ØbbYb`]a`: fØ\`]b[ `Ui`Z`XYf  
GhUX`h`K`YVg]hY`ZØf`\`fY`: Uj cf]hYb`UVgh]a`a Yb``8]Y`B`UWx`Zc`[ Yf`j`cb  
Gwx`k ]a`a Yf]b`<UbbU`@Y`a`a Yfa`Ubbž`<UbXVU``!Hcfk`Ufh`G`]Ug  
Gwx`i`a`UWxYf`i`bX`XYa`F`c`W`!`b`!F`c``!DUUf`?Uf]bU`?i`bghi`bX`@Y`j`  
9``a`Yfg`k`YfXYb`[ Ygi`Wx`h``8]YgY`Gdcfh`Yf`\UVYb`]b`XYf  
j`Yf[ Ub[ YbYb`K`U\`X]Y`a`Y]ghYb`Gh]a`a Yb`Yf\`U`hYb``5a`HU[ `XYf  
9\fi b[ `\_ØbbYb`g]Wx`U``Y`Ui`ZY]b`gdUbbYbXYg`F`U\`a`Ybdfc[ fUa`a  
ZfYi`Ybž`k`À\`fYbX`X]Y`@Y]ghi b[ Yb`XYf`5h\`YhYb`]a`A`]hY`di`b`h  
ghY\`Yb``K`Y]hYfY`ϑZcfa`Uh]cbYb`ni`f`J`YfUbghU`hi`b[ `i`bX`ni`XYb  
\_cgYb`cgYb`9]bhf]hg\_UfhYb`k`YfXYb`]a`: YVfi`Uf`&\$&)

j YfÖZYbh]W.h"

8YhU]`g

Cfh

8Y`a Yb\cfghž8Yi hgW\`UbX

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