

9a a m!J Yf`Y]\i b[ `&\$&' . '@Yj m!8i c'gcf[ h  
ZØf`DfYa ]YfY`]b`@cg`5b[ Y`Yg

9i [ YbY`i bX`8Ub`@Yj m'a cXYf]YfYb`X]Y`+\*''9a a m!  
J Yf`Y]\i b[ `Ua`i%) "'GYdhYa VYf`]b`@cg`5b[ Y`Yg": fYi Yb`G]Y  
g]W`Ui ZY]bY`i bj Yf[ Ygg`]W`Y`B U`W`h`

8]Y`X]Yg`Ä\ f][ Y`9a a m!J Yf`Y]\i b[ `j Yfgdf]W`h`Y]b`[ Ubn  
VYgcbXYfYg`9fY][ b]g`ni`k YfXYbž`XYbb`X]Y`\_UbUX]gW`Yb  
GW`Ui gd]Y`Yf`9i [ YbY`i bX`8Ub`@Yj mž`VY`\_Ubb`h`Xi fW` ]\fY  
Ni gUa`a YbUfVY]h`]b`XYf`j ]Y`ZUW`\_Ui g[ YnY]W`b`Y`h`Y`b`GYf]Y`~GW`]hh`g  
7fYY`\_ " ž`k YfXYb`U`g`A cXYfUhc`fYb`Ui Z`XYf`6Ø\`b`Y`ghY`Yb`"5a`i%) "  
GYdhYa VYf`k ]fX`X]Y`+\*''Df]a`Yh]a`Y!9a a m!; U`U`j]Y`VY]a`GYbXYf  
567`ØVYfhfU[ Yb`i bX`Y`fh`X]Y`VYghYb`@Y]ghi b[ Yb`]a`i: YfbgY`Yb`"

6YgcbXYfg`6YXYi hi b[ `XYf`J UhYf!Gc`b!  
8mbUa ]\_

8]YgYg`j\ f`]gh`VYgcbXYfgž`XU`Yfgha`U`g`Y]b`J UhYf!Gc`b!8i c`X]Y  
A cXYfUh]cb`XYf`9a a mg`ØVYfb]a`a`h`9i [ YbY`@Yj mž`++`j\ fY`U`h  
i bX`VY`\_Ubb`h`Ui g`XYf`~5a`Yf]W]b`D]Y`!FY]\Yž`i bX`gY]b`(`%!\Ä\ f][ Yf  
Gc`b`8Ub`@Yj mž`XYf`gck`c`\`U`g`GW`Ui gd]Y`Yf`U`g`Ui W`\_U`g  
DfcXi`nYbh`[ fc»Y`9fZc`[ Y`ZY]YfhYž`k YfXYb`[ Ya`Y]bgUa`X]Y`; U`U  
`Y]hYb`"8]YgY`Y]bn][ Ufh][ Y`A cXYfUh]cb`\_Øbb`h`Y`XYf`J YfUbghU`hi b[  
Y]bY`bYi`Y`8]a`Ybg]cb`j Yf`Y]\Ybž`]bXYa`g]Y`X]Y`Yb[ Y`6Yn]Y`i b[  
nk ]gW`Yb`XYb`VY]XYb`i bX`XYfYb`[ Ya`Y]bgUa`Y`9fZc`[ Y`nY][ h`"

9fZc`[ fY]W`Y`J Yf[ Ub[ Yb`Y]h`a` ]h`~GW`]hh`g  
7fYY`\_ "

9i [ YbY`i bX`8Ub`@Yj m\UVYb`b]W`h`bi f`]b`XYf`9a a m!; YgW`]W`h`Y

; fc» Yg [ Y`Y]ghYhž`gcbXYfb`Ui W` [ Ya Y]bgUa`X]Y`GYf]Y`~GW`]hg  
7fYY\_`" `Ybhk ]W\_Y`hž`]b`XYf`g]Y`J UhYf`i bX`Gc`b`gd]Y`hYb`"8 ]Y  
<UbX`i b [ `XfY`h`g]W`i a` `X]Y` : Ua` ]Y`FcgYž`X]Y`bUW`Y`]bYa  
Z]bUbn]Y`Yb`Fi ]b [ `Ynk i b [ Yb`]ghž`]b`Y]b`VYgW`Y]XYbYg`A chY` `]b  
XYf`?`Y]bghUXh`GW`]hg`7fYY\_`ni` `n]Y`Yb`"8]Y`GYf]Y`k i fXY`VY]`XYf  
9a a m!J Yf`Y`\i b [ `&\$&\$`a` ]h`g]YVYb`5i gnY]W`bi b [ Yb`ZØf`7ca`YXm!  
GYf]Yb` [ YY`fhž`k Ug`]\fY`VYXYi hYbXY`F c`Y`]b`XYf  
: YfbgY`\`UbXgW`UZh`i bhYfghfY]W`h"

## Bca ]b]Yfi b [ Yb`i bX`?`cb`\_i`ffYbn

ϕ`6Yni [ `Ui ZX]Y`X]Yg`Å`f][ Y`9a a m!; U`U`ghY`Yb`j ]Y`Y  
VYXYi hYbXY`K Yf`\_Y`ni f`5i gk U`"8]Y`@]hYfUhi fUXUdh]cb`~G`c [ i b`  
i bX`X]Y`7cc`\_]b [ !G`ck`i`~H`Y`6YUf`?`]b [ `cZ`h`Y`?]hW`Yb`" `hfYhYb  
a ]h`XYb`a`Y]ghYb`Bca ]b]Yfi b [ Yb`Ub`"~G`c [ i b`" `ZØ`fh`a` ]h`&)  
Bca ]b]Yfi b [ Yb`ž`k`Å`fYbX`~H`Y`6YUf`" `&` `7`UbW`b` `Uhž`DfY]gY`ni  
 [ Yk ]bbYb`"GhUfg`k ]Y`>`bb]Zf`5b]ghc`b`ž`F`Y`Y`g`Y`K ]h`Yfgdccb`ž`i bX  
8cbU`X` ; `cj`Yf`g]bX`i bhYf`XYb`Bca ]b]Yfi b [ Yb`j`YfhfYhYb`i bX  
a UW`Yb`X]Y`?`cb`\_i`ffYbn`VYgcbXYfg`ghUf`\_`"

## 9]b`6`\_]W`\_]b`X]Y`Ni`\_i`bZh`XYf`9a a mg

8]Y`9bhgW`Y]Xi b [ ž`9i [ YbY`i bX`8Ub`@]j`m`U`g`A`cXYfUhc`fYb  
Ui`gni`k`Å`Ybž`\_ØbbhY`Ui`W`Ui`ZY]bY`dcg]h]j`Y`9bhk ]W`\_i`b [ `]a  
: YfbgY`Yb` `]bk`Y]gYb`"8]Y`6Yhc`bi`b [ `j`cb`8]j`Yfg]h`Å`h`i`bX`\_fYUh]j`Yb  
DUf`hb`YfgW`UZhYb`g]W`hVuf`ni`a`UW`Ybž`\_ØbbhY`XYf`GW`ØggY`ZØf  
X]Y`ni`\_ØbZh][ Y`Dfc [ fUa`a` ]Yfi`b [ `gY]b`"8]Y` : Ub`g`XØfZYb`g]W`Ui`Z  
Y]bY`i`bj`Yf [ Ygg`]W`Y`BUW`h`ZfYi`Ybž`X]Y`b]W`h`bi`f`ZØf`X]Y  
; Yk ]bbYfž`gcbXYfb`Ui`W`ZØf`X]Y` [ YgUa`hY`6fUbW`Y`j`cb  
6YXYi`hi`b [ `]gh"

Ni`gUa`a`YbZUggYbX`~Åggh`g]W`gU [ Ybž`XUgg`X]Y`\_ca`a`YbXY`9a`a`m!  
J`Yf`Y`\i`b [ `b]W`h`bi`f`X]Y`VYghYb`HU`Yb`hY`]a` : YfbgY`Yb`k`ØfX][`hž  
gcbXYfb`Ui`W`X]Y`ZJa` ]]ÅfY`6]bXi`b [ `nk ]gW`Yb`XYb`@]j`mg`Ui`ZX]Y  
6]XgW`]fa`Y`Vf]b [ `h`"8]Y`J`YfUbghU`hi`b [ `ghY`h`ZØf`Y]bY`?`ca`V]bUh]cb  
Ui`g`HfUX]h]cb`i`bX`Zf]gW`Ya`K ]bX`]b`XYf` : YfbgY`\_i`hi`f"

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