

### FY]gYnY]h'a ]h'< Ui gh]YfYb

9]bY'I f`Ui VgfY]gY'a ]h'<Ui gh]YfYb'VYXUfZY]bYf`gcf[ ZÀ`h][ Yb i bX'[ i hYb'] cfVYfY]hi b[ "'8]Y'J Yfgcf[ i b[ 'XYf'<Ui gh]YfY a i gg`g]WXYf[ YghY``h`gY]b'i bX'a Ub'gc``hY'\_Y]bY'H]YfY'Ui g XYa 'I f`Ui V'a ]hVf]b[ Yb"' =bgVYgcbXYfY'VY]'XYb a ca YbhUbYb'<]hnYk Y``Ybž']gh'Yg'VYgcbXYfg'k ]WXh][ ž'Ui WXUb'X]Y'H]YfY'ni 'XYb\_Ybž'X]Y'VY]'XYf'I f`Ui VgfY]gY']a '5i hc a ]h[ Ybca a Yb'k YfXYb"'6Y]'<i bXYb'gc``hYb'VY]'`Àb[ YfYb 5i hc ZU\fhYb'Ui gfY]WXYbX'DUi gYb'Y]b[ Yd`Ubh'k YfXYb"'8]Y H]YfY'gc``hYb'Ja '5i hc'gc'i bhYf[ YVfUWXh'k YfXYbž'XUgg'g]Y b]WXh'XYf'X]fY\_hYb'GcbbYbY]bghfU\`i b[ 'Ui g[ YgYhnh'g]bX" @UggYb'G]Y'=\fY'H]YfY'b]Y'U``Y]bY']a '5i hcž'Ui WX'b]WXh'VY] \_i fnYb'DUi gYb'CXYf'FY]gYi bhYfVfYWXi b[ Yb'\*8]Y =bYbfÀi a Y'XYf'5i hcg'\_ÒbbYb'g]WX']b'XYf'GcbbY']bbYf\U`V / Ua d\Y'`]d/

9]bY'l f`Ui VgfY]gY'a ]h'< Ui gh]YfYb'VYXUfZ'Y]bYf
gcf[ ZÀ`h][ Yb'i bX'[ i hYb'J cfVYfY]hi b[ "'8]Y'J Yfgcf[ i b[ 'XYf
< Ui gh]YfY'a i gg'g]W\Yf[ YghY``h'gY]b'i bX'a Ub'gc``hY'\_Y]bY
H]YfY'Ui g'XYa'l f`Ui V'a ]hVf]b[ Yb"

#bgVYgcbXYfY'VY]'XYb'a ca YbhUbYb'<]hnYk Y``Ybž']gh'Yg
VYgcbXYfg'k ]Wkh][ ž'Ui Wk'Ub'X]Y'H]YfY'ni 'XYb\_Ybž'X]Y'VY]'XYf
I f`Ui VgfY]gY']a '5i hc'a ]h[ Ybca a Yb'k YfXYb"'6Y]'<i bXYb'gc``hYb
VY]'`Àb[ YfYb'5i hcZU\fhYb'Ui gfY]WkYbX'DUi gYb'Y]b[ Yd`Ubh
k YfXYb"'8]Y'H]YfY'gc``hYb']a '5i hc'gc'i bhYf[ YVfUWkh'k YfXYbž'XUgg
g]Y'b]Wkh'XYf'X]fY\_hYb'GcbbYbY]bghfU\`i b[ 'Ui g[ YgYhnh'g]bX"
@UggYb'G]Y'=\fY'H]YfY'b]Y'U``Y]bY']a '5i hcž'Ui Wk'b]Wkh'VY]'\_i fnYb
DUi gYb'cXYf'FY]gYi bhYfVfYWki b[ Yb''8]Y'=bbYbfÀi a Y'XYf'5i hcg
\_`ObbYb'g]Wk']b'XYf'GcbbY']bbYf\U`V'\_ØfnYghYf'NY]h'gc'ghUf\_
Ui Z\Y]nYbž'XUgg'X]Y'H]YfY'Yf\YV']Wk'`Y]XYb'i bX'gc[ Uf
@YVYbg[ YZU\f'Xfc\h"'5i Wk'qc``hY'ZØf'X]Y'H]YfY'Ui qfY]WkYbX</pre>

K UggYf'i bX': i hhYf'a ]h[Ybca a Yb'k YfXYb 'gU[hY'XYf'A]b]ghYf'ZØf 9fbÀ\fi b[ž'@ÀbX`]WXYb'FUi a 'i bX'JYfVfUi WXYfgWXi hnž'DYhYf <Ui \_ž'Ua '\$) "'5i [i gh'&\$&&']b'Ghi hh[Ufh"

# =bZcfa ]YfYb'G]Y'g]W\'fYW\hnY]h]['ØVYf 8c\_i a YbhYž'=a dZi b[Yb'Yh'WYhYfU

FY]qYb'<ibXYž'?UhnYbž':fYhhW\Yb'cXYf'<Y]a j Ò[Y``a ]h']b'XYb I f`Ui Vž'gc``hY'a Ub'g]W\']a 'JcfZY`X']bZcfa ]YfYbž']bk ]YkY]h'X]Y  $H]YfY \cdot gdYn]Y \cdot Y \cdot 8c_i a YbhYž \cdot 6Y \setminus UbX \cdot i b[Yb \cdot cXYf = a dZ b[Yb \cdot ZØf]$  $X]Y^9]bfY]gY^]b^XUg^If^UiVg^UbX^ibX^X]Y^FØW__Y^f^bUW$ 8 Yi hgWX`UbX`VYbOh][Yb"' \deltagVYgcbXYfY`k Ybb`Yg`ni a `I f`Ui V`]b @AbXYf'Ui » Yf\U`V'XYf'9i fcdA]gWXYb'I b]cb'fPI Ł'[Y\hž'gc``hY'g]WX  $U^Y'HYfU^hYf]bbYb'ibX'HYfU'hYfYf_ibX][YbžcV'Yg'g]W'VY]a$ Yk Y]`][ Yb F Y]gYn]Y``i a 'Y]b 'gc [ YbUbbhYg'b ]W h'[ Y`]ghYhYg 8 f]hh`Ub X '\Ub XY`h": Øf X]Y 'K ]Y XY fY]b fY]qY 'j cb' < i b XY b ž ? Uhn Y b i bX: fYhhWXYb 'Ui g'X]YgYb 'b]WXh'[Y`]ghYhYb '8f]hh`ÀbXYfb ']b 'XUg ; YV]Yh'XYf'9I ž'a ØggYb'bYVYb'XYa '<mark>9I !< Y]a h]YfUi gk Y]g'i</mark> bX  $Y]bYf'[\emptyset'h][Yb'Hc''k i h]a dZ b['Ui W'Y]bY'6Ygh]a a i b['XYg$  $Hc^k ih! 5bh]_OfdYfh]hYfg^i cf^Y[Yb''8]YgVYnØ[^]WX^gc^hY^a Ub^g]WX$  $Zf\emptyset \setminus nY \mid h \mid [ \ ]a \ J \ cfZY \setminus X \cdot XY f \cdot F \ Y \mid gY \cdot a \ | h \cdot gY \mid b \ Y f \cdot < U \mid gh \mid Y f \land f \cap h \mid b \mid f \mid h \cdot g \mid h \cdot gY \mid h$ VYn]Y\ib[gkY]gY]bYa <Uigh]YfUfnh'UVgh]a a Yb ž'VYhcbhY  $A \mid b \mid ghYf' < Ui \_" ? ObbYb `X \mid Y `H \mid YfY `VY \mid `XYf' K \mid YXYfY \mid bfY \mid gY `X \mid Y$ j cf[ YgWX f]YVYbYb '6YX]b[ i b[ Yb 'b]WX h'YfZØ``Ybž'gc '\_Ubb 'X]Yg'ni Yf(YV)W(Yb) = bUbbY(a)W(Y)hYbV(Y)Y)bYf?cbhfc``YZØ(fYb"; Y[YVYbYbZU``g`kYfXYb`X]Y`H]YfY`UiZ'?cghYb`XYg`H]Yf\U`hYfg`]b Ei UfUbhàby i bhyf[ yvfuWkh"

#### J Yfgcf[ib[ XYf < Ui gh]YfY g]WX YfghY ``Yb

?Ubb'XUg'Y][YbY'H]Yf'b]W\h'a ]h']b'XYb'I f`Ui V'[Ybca a Ybk YfXYbž'gc'gc``hY'a Ub'g]W\fYW\hnY]h]['i a 'Y]bY I bhYfVf]b[i b[ga Ò[`]W\\_Y]hž'VY]gd]Y`gk Y]gY']b'Y]bYf'H]YfdYbg]cb cXYf']a 'H]Yf\Y]a '\_Øa a Yfb'cXYf'X]Y'JYfgcf[ib['XYf'H]YfY'XifW\: fYibXYž'6Y\_UbbhY'cXYf'BUW\VUfb'k À\fYbX'XYf'5Vk YgYb\Y]h
g]W\YfghY``Yb"' < ]Yfni 'gc``hYb'X]Y'VYhfYi YbXYb'DYfgcbYb'gW\cb
]a 'JcfZY`X'XYg'I f`UiVg']b'X]Y'JYfgcf[ib['XYf'H]YfY'Y]b[Yk]YgYb
ibX'a ]h'XYb'H]YfYb'VY\_Ubbh'[Ya UW\h'kYfXYb"': Øf'XYb'BchZU``
gc``hY'Y]bY'HY`YZcbbi a a Yf'\]bhYf`UggYb'k YfXYbž'X]Y'VY]'6YXUfZ
\_cbhU\_h]Yfh'k YfXYb'\_Ubb 'VYhcbhY'XYf'A]b]ghYf"

#### ?Y]bY'H]YfY'Ui g'XYa 'I f`Ui V'a ]hVf]b[Yb

GhfYi bYbXYž'j Yfa i h`]WX '\YffYb`cgY'H]YfY'cXYf'H]YfY'j cb
H]Yfa Àf\_hYb'gc``hYb'b]WX h'Ui g'A ]h`Y]X'Ui g'XYa 'I f`Ui V
a ]h[YVfUWX h'k YfXYbž'XU'Y]bYfgY]hg'ZØf'X]Y'H]YfY'ni a Y]gh
VYgh]a a hY'9]bfY]gYVYgh]a a i b[Yb'ni 'VYUWX hYb'g]bXž'X]Y']b'XYf
?ØfnY'XYg'I f`Ui VgUi ZYbh\U`hg'b]WX h'YfZØ``h'k YfXYb'\_ObbYbž'i bX
UbXYfYfgY]hg'XYf'; Ygi bX\Y]hgni ghUbX'XYf'H]YfY'a Y]gh'b]WX h
VY\_Ubbh']gh"'8 UXi fWX'\_ObbYb'ni a 'HY]`'Yf\YV`]WXY': c`[Y\_cghYb
Xi fWX'h]YfAfnh`]WXY'6Y\UbX`i b[Yb'YbhghY\Yb''': YfbYf'k YfXYb
Xi fWX'gc`WXY'?Ài ZY']a '5i g`UbX'VY]'i bgYf]OgYb'<ÀbX`Yfb'cXYf
NØWX hYfb'cZha U`g'h]YfgWXi hnk ]Xf][Y'<U`hi b[gVYX]b[i b[Yb
i bhYfghØhnh ž'gc'A]b]ghYf'<Ui \_"

a a Yf'k ]YXYf'\_ca a h'Yg'Ui W\'j cfž'XUgg'I f'Ui VYf'Ub': `i [\ÀZYb VY]'XYf'FØW\_fY]gY'j cb'j Yfa Y]bh`]W\Yb'H]YfgW\i hncf[Ub]gUh]cbYb cXYf'Df]j UhdYfgcbYb'Ub[YgdfcW\Yb'k YfXYb'i bX'g]Y'[YVYhYb k YfXYbžY]bYb'<i bX'cXYf'Y]bY'? UhnY'U`g'gc[YbUbbhYf': `i [dUhYb]a 'df]j UhYb'FY]gYj Yf\_Y\f'a ]hni bY\a Yb"

8]YgYf'j Yfa Y]bh`]WXY; YZU``Yb`ghY``h`YXcWX`Y]b`]``Y[U`Yg JYfVf]b[Yb'jcb'X]YgYb'H]YfYb']a 'FY]gYj Yf\_Y\f'XUfž'XU'ZØf'X]YgY 5fh'XYf'9]bfY]gY'X]Y'ghfYb[YfYb'h]YfgYi WXYbfYWXh`]WXYb 9]bfY]gYVYgh]a a i b[Yb'ZØf'XYb'<UbXY``[Y`hYb"'GcZYfb'X]Y'H]YfY b]WXh'XYb'jcf[YgWXf]YVYbYb'h]Yf[Ygi bX\Y]hgfYWXh`]WXYb 5bZcfXYfi b[Yb'YbhgdfYWXYbž'\_ÒbbhYb'Ui Z'X]Y'gc[YbUbbhYb :`i[dUhYb'\c\Y'?cghYb'ZØf'XYb'FØW\_hfUbgdcfh'XYg'H]YfYg']b XYggYb'<Yf\_i bZhg`UbX'cXYf'X]Y'I bhYfVf]b[i b[']b'Y]bYf Ei UfUbhÀbYY]bf]WXhi b['ni\_ca a Yb"

## FY]gYb'a]h' < Y]aj Õ[Y`b

5VYfUiWVY]FY]gYba]h< Y]a j O[Ybnia 6Y]gd]YYY]bYaKY``Ybg]hh]WX cXYfY]bYa DUdU[Y] g]bX VYgh]a a hY J cf[UVYb ni  $VYUWXhYb""GcZYfb"< Y]a i O[Y"]a "df]i UhYb"FY]gYi Yf_Y\f"Ui g$ UbXYfYb'9I!A]h[`]YXghUUhYb'bUWX'8Yi hgWX`UbX'Y]bfY]gYb'gc``Ybž gc ]gh X]Y H]YfnU\``Ui Z'a UI ]a U``XfY] J Ò[Y``VY[fYbnh i b X ZØf DUdU[Y]Yb'ibX'G]hh]WXY'aigg'Y]bY'Uah`]WXY;  $YgibXY]hgVYgWXY]b][ib[a]h[YZØ\fhkYfXYb"FY]gYbX]YH]YfY$ Ui g'Y]bYa 'Ui » YfYi fcdÀ]gW\Yb '@UbX'Y]bž'gc ']gh'X]Y 'H]YfnU\`'Ui Z a UI ]a U`ZØbZ'J Ò[Y`VY[fYbnh'i bX'X]Y'J Ò[Y`a ØggYb VY]gd]Y`gk Y]gY a ]h'Y]bYa 'HfUbgdcbXYf'cXYf'Y]bYa 'F]b[ [Y\_YbbnY]W\bYhqY]b": YfbYfa ØqqYb X]Y H]YfY j cb Y]bYf Ua hgh|YfÀfnh`|WXYb'H|Yf[YgibX\Y]hgVYgWXY]b][ib['ibX'Y]bYf  $H]Yf\setminus U`hYfYf_`Àfib[`VY[`Y]hYh`qY]b"=a `JcfZY`X`XYf`9]bfY]qY$ a ØggYb'X]Y'JÒ[Y`Ybhk YXYf']b'Ei UfUbhÀbY'cXYf'g]Y'a ØggYb gdYn]Y``Y`Jcf[UVYb`YfZØ``Yb"'8]YgY'jYfY]bZUW\hYb'FY[Y`ib[Yb [Y`hYb`YXcW\`bif`]b': À``Ybž']b'k Y`W\Yb'X]Y'H]YfY']a 'BUW\[Ub[ b]Whij YfÀi » Yfh'c XYf'Ub 'Y]bYb 'Ub XYfYb '< U`hYf'UV[Y[YVYb k YfXYb 'gc ``Yb" '5bgcbghYb 'g]bX 'X]Y 'J cf[ UVYb 'ZØf 'XYb  $[YkYfV^{M}Yb^{-}< UbXY^{Y}]bni^{U}hYb^{-}$ 

GhUUh`]WX Yb 'H]YfÀfnh`]WX Yb 'I bhYfgi WX i b[gUa hg'5i `YbXcfZ.: U`hV`Uhh' 5i Z'FY]gYb 'a ]h'<i bXYb' 'H]ddg'i bX ?fUb\_\Y]hYb 'fD8: Ł

A ]b]ghYf]i a 'ZØf'9fbÀ\fi b[ž'@ÀbX`]W\Yb'FUi a 'i bX JYfVfUi W\YfgW\i hn.'FY]gYjYf\_Y\f'a ]h'H]YfYb

9i fcdÀ]gWXY'l b]cb. 'FY]gYb'a ]h'<Ui gh]YfYb'i bX'UbXYfYb H]YfYb']b'XYf'9I

=bgd]f]Yfhi| cb @UbXYgfY[]Yfi b[ 6K

# 6Ygi WXYb G]Y i bg Ui Z b!U[ "XY