

## 9]b ` \ UfhYg' > \ f' ZØf' ÒZZYbh`]W\ Y `A ]bYf

8 ]Y `A ]b]b[ !8 UhYbgY]hY' < Ug\ fUhY' ðXYI ` \ Uh'Y]bYb'6Yf]W\ h  
j YfÒZZYbh`]W\ hž'XYf'XYb'Ni ghUbX'XYf'6]hWc]b!A ]b]b[ ! ðXi ghf]Y  
]a ` > \ f' & \$ & & 'k ]XYfgd]Y[ Y`h''8 ]Y `5bU`mgY`i bhYfgi W\ h'XYb  
ghUf\_Yb'F ØW\_[ Ub[ `XYf'A ]b]b[ !F YbhUV`]hÀh']a ` > \ f' & \$ & & 'ja  
J Yf[ `Y]W\ `ni `& \$ & %]ba ]hhYb'g]b\_YbXYf'6]hWc]b!DfY]gY`i bX  
Y]bYf'ghY][ YbXYb' < Ug\ !F UhY''8 Yf' \ ÀfhYghY'6ÀfYba Uf\_h'Dfc  
X]Y`DfØZVYf]W\ h'8 Yf'Ua `A ]hkcW`j YfÒZZYbh`]W\ hY' < Ug\ dfY]g  
j cb'6]hWc]b`YffY]W\ hY`ja `Bcj Ya VYf`YhnhYb' > \ fYg`Y]b  
5`nY]hh]YZj cb') ) ž- ( ` ` #D< #HU[ "'8 Yf' < Ug\ dfY]g]gh'Y]b`Ui Z  
8c`Uf`Ui hYbXYg'A U» `ZØf'X]Y'9]bbU\ a Yb'XYf'A ]bYf'ZØf'YXY  
j Yfk YbXYhY'9]b\Y]h'XYf' < Ug\ ]b[ !@Y]ghi b[ "'8 Yf  
> \ fYgXi fW\ gW\ b]hhgd fY]g'ZØf' < Ug\ `ja ` > \ f' & \$ & & 'VYhfi [  
%&' ž , ` ` #D< #HU[ ž'Y]b'ghUf\_Yf'F ØW\_[ Ub[ ` [ Y[ YbØVYf'XYa  
8i fW\ gW\ b]hhj cb' ' %( ž\* % ` ` #D< #HU[ / Ua d^Y``]d/

8 ]Y `A ]b]b[ !8 UhYbgY]hY' < Ug\ fUhY' ðXYI ` \ Uh'Y]bYb'6Yf]W\ h  
j YfÒZZYbh`]W\ hž'XYf'XYb'Ni ghUbX'XYf'6]hWc]b!A ]b]b[ ! ðXi ghf]Y`ja  
> \ f' & \$ & & 'k ]XYfgd]Y[ Y`h''

8 ]Y `5bU`mgY`i bhYfgi W\ h'XYb'ghUf\_Yb'F ØW\_[ Ub[ `XYf'A ]b]b[ !  
F YbhUV`]hÀh']a ` > \ f' & \$ & & 'ja `J Yf[ `Y]W\ `ni `& \$ & %]ba ]hhYb  
g]b\_YbXYf'6]hWc]b!DfY]gY`i bX`Y]bYf'ghY][ YbXYb' < Ug\ !F UhY''

## 8 Yf' \ ÀfhYghY'6ÀfYba Uf\_h

Dfc'X]Y`DfØZVYf]W\ h'8 Yf'Ua `A ]hkcW`j YfÒZZYbh`]W\ hY' < Ug\ dfY]g  
j cb'6]hWc]b`YffY]W\ hY`ja `Bcj Ya VYf`YhnhYb' > \ fYg`Y]b`5`nY]hh]YZ  
j cb') ) ž- ( ` ` #D< #HU[ "'8 Yf' < Ug\ dfY]g]gh'Y]b`Ui Z`8c`Uf`Ui hYbXYg  
A U» `ZØf'X]Y'9]bbU\ a Yb'XYf'A ]bYf'ZØf'YXY`j Yfk YbXYhY'9]b\Y]h  
XYf' < Ug\ ]b[ !@Y]ghi b[ "'

8 Yf \fYgXi fW gW b]hgd fY]g ZØf < Ug \ ja \f &\$&& VYhfi [ %&' ž , ' #D< #HU[ žY]b ghUf\_Yf'F ØW\_[ Ub[ ' [ Y[ YbØVYf'XYa 8 i fW gW b]hh'j cb'' %( ž\* %~ #D< #HU[ 'ja \f &\$&% "8 Yf'ghUf\_Y F ØW\_[ Ub[ 'k i fXY '[ fØ» hYbhY]'g Xi fW XYb'6Y[ ]bb XYf'6U]ggY'j cb 6]hWc]bžUVYf'Ui W Xi fW Y]bYb'Xi fW gW b]hh]WYb'5bgh]Y[ 'XYf 9bYf[ ]Y\_cg hYb'i a '\* 'i 'j Yfi fgUW h'&\$&&]b XYb'J YfY]b][ hYb GhUUhYb''

' ) '6i bXYgghUUhYb \UVYb'b]YXf][ YfY'Xi fW gW b]hh]WY ]bXi ghf]Y''Y'Ghfca dfY]gY'U'g'XYf'U\_hi Y''Y'6fYU\_!9j Yb!Ghfca dfY]g j cb'G%- 'Dfc'j cb'- &'l G!8c''Uf'dfc'A K \ žYf\_ÀfhY'XYf'6Yf]W h''

GhY][ YbXY'9bYf[ ]Y\_cg hYb''Y» Yb'Ui W Xi Y'?cghYb'ZØf'<cgh]b[ ! 8]YbghY' ]b'X]Y'<Ø\Y'gW bY''Yb''K À\ fYbX'Y]b' Ub[ Ya YggYbYf J YfhfU[ 'j cf'&\$&&'DfY]gY'j cb'\$žš) 'V]g'\$žš\*'' #\_K \ 'Ub[ YVchYb \UVYb'\_ØbbhYž'g]bX'Yhnh'DfY]gY'i a '\$žš, 'V]g'\$žš-'' #\_K \ 'b]W h i b[ Yk Ø\ b]W '' 5''Yg'i bhYf'\$žš+)'' #\_K \ [ ]'h'Ub[ Yg]W hg'XYf A Uf\_hVYX]b[ i b[ Yb'U'g' GW bÀddWYb ž 'Z \ f'XYf'6Yf]W h'Zc fh''

I bhYfXYggYb' ]gh'XYf'<UbXY''a ]h'5G=7g' 'XYb'gdYn]U' ]g]YfhYb A UgW ]bYbž'a ]h'XYbYb'6]hWc]b'YZZ]n]Ybh'UV[ YVUi h'k ]fX' 'ghUf\_ ni fØW\_[ Y[ Ub[ Yb''F][ g'U''Yf'bYi Ybž'a ]hh'YfYb'i bX'U'hYb ; YbYfUh]cbYb'j YfnY]W bYhYb'Yk Y]'g'Y]bYb'F ØW\_[ Ub[ 'XYf F YbX]hYb'i a 'ØVYf', \$'i ž'k Ug'XUni 'ZØ\ fhYž'XUgg'X]Y'DfÀa ]Y'ZØf XYb'G%- 'LD'ja '@Ui ZY'XYg'fYg'gh]Y[ ''

## 2 ZZYb h]W Y 'A ]b Y f ''Y ]X Y b

2 ZZYb h]W Y '6]hWc]b!A ]bYf'\UVYb'b'X]YgYa 'l a ZY'X'[ fc»Y'J Yf'i ghY Yf']hhYbž'k cVY]'X]Y'a Y]ghYb'fY]bYb'6]hWc]b!A ]b]b[ !5\_h]Yb'ja \f &\$&&'i a 'ØVYf'- \$'i 'Y]bVfUWYb''9]bYf'XYf'k Y'hk Y]h[ fØ» hYb A ]bYf' '7cfY'GW]Yb]h]Z]Wf7CFNÉ' 'Z]Y''i a '- - 'i ž'U'g VYgcf[ b]gYffY[ YbXY'; YfØW hY'ØVYf'X]Y'NU\ 'i b[ gZÀ\][ \_Y]h'XYg I bhYfbY\ a Ybg'Ui Z\_Ua Yb'ž'\_i 'a ]b]YfYbX'' ]b'Y]bYa 'cZZ]n]Y''Yb ?cb\_i fgUbhfU[ ' [ Y[ Yb'9bXY'XYg'fYg''

8]Y'A ]bYbU\_h]Y'a ]h'XYf'nk Y]hgW\YW hYghYb'DYfZcfa UbW'k Uf ; fYYb]X[ Y'; YbYfUh]cb'f] F99ž'X]Y'i a '- , 'i 'Z]Y'ž'XU'g]Y

GWk ]Yf[ \_Y]hYb`UhhYž`cWj Yfn]bg`WXY`GWi`XYb  
ni fØW\_ni nU`YbžX]Y`a ]h`fYb`Y][ YbYb`5G⇒!A UgW ]bYb`VYg]WYfh  
k UfYb"

5bXYfY`A ]bYf`k ]Y`≠]g`9bYf[ m`UVYb`YVYbZU`g`i bhYf`XYf`@Ugh  
gc`WYf`?fYX]hY`[ Y`hYbžk cni`≠]g`[ Ynk`i b[ Yb`k Uf`GWfA[ ghf]W`  
gY]bY`6Yf[ VUi`\_UdUn]h`hž`i a`gY]bY`GWi`XYb`[ Y[ YbØVYf`BMB`≠  
]a`Bcj Ya`VYf`ni fØW\_ni nU`Yb"

2 ZYbh]WY`A ]bYf`k i fXYb`XUni`Ub[ YfY[ hžk`A`fYbX`XYg  
6i`Yba`Uf`hg`&\$&%`gc`gW`bY`k ]Y`a`Ò[ `]W`ni`Yi`dUbX]YfYbžk`Ug  
XUni`ZØ`fhYž`XUgg`gY`]\fY`<Ug`fUHy`!8ca`]bUn`[ Y[ YbØVYf  
df]j`UhYb`6Yf[ `Yi`hYb`j`cb`%(`i`Ui`Z`%-`i`k`Y]hYf`Ui`gVUi`hYb"

⇒a`Y`f`&\$&`gh]Y[ `X]Y`; YgUa`h`<Ug`fUHy`j`cb`6]hWc]b`i`a`k`Y]hYfY  
(`%i`"5i`W`X]Yg`k`i`fXY`[`fØ`»`hYbhY]`g`j`cb`ØZYbh]WYb`6Yf[ `Yi`hYb  
j`cfUb[ Yhf]YVYbžX]Y`]\fY`\_i`a`i`Y]fhY`<Ug`fUHy`i`a`i`)-`i`  
[ Y[ YbØVYf`Y]bYa`5bgh]Y[ `j`cb`%-`i`VY]`]\fYb`df]j`UhYb`?c`Y[ Yb  
Yf`Ø`hYb"

GW`Y]Y`W`k`Uf`&\$&`Y]b`Y`f`ž`]b`XYa`6]hWc]b!A`]b]b[ `XUg`Y]bn][ Y  
DfccZcZK`cf`!Gd]Y`]b`XYf`GhUXh`k`i`fXY`"GY]b`Y]bn][ Yf[ `fc`»`Yf  
F]j`U`Yž`9h`YfYi`a`ž`AbXYfhY`A`]hY`GYdhYa`VYf`gY]bYb  
?cbgYbga`YWU]b]ga`i`g`]b`DfccZcZ`GhU`\_Y`i`bX`VYbXYhY`XUa`]h`X]Y  
6Yf[ VUi`]bXi`ghf]Y`j`cb`9h`YfYi`a`a`]h`Y]bYa`i`d[ fUXY"

Hfchn`XYf`XfY]Y]b`U`V`A`cbUhy`j`cb`9h`YfYi`a`c`bY  
5fVY]hgbUW`k`Y]g`Yf`k`]fhgW`UZhYhYb`X]Y`A`]bYf`]a`BYhk`Yf`\_`]a  
j`Yf[ Ub[ YbYb`Y`f`]a`a`Yf`bcW`ZUgh`gc`j`]Y`i`a`gUhn`k`]Y`X]Y`6]hWc]b!  
A`]bYf`f]`ž`+`A`]`]UfXYb`i`G!8c`Uf`[ Y[ YbØVYf`-`ž`)]`A`]`]UfXYb`i`G!  
8c`Uf`ł`<Yi`hY`k`i`fXYb`9h`YfYi`a`!A`]bYf`Xi`fW`GhU\_]b[ `!  
J`U`]XUhc`fYb`YfgYhnhž`X]Y`bYi`Y`9H`<`ni`Y]bYa`DfY]g  
dfcXi`n]YfYb`j`]Y`U`b[ gUa`Yf`U`g`A`]bYf`j`cf`XYf`:`i`g]cb"

9]bbU`a`Yb`j`cb`GhU\_]b[ `!J`U`]X]YfYfb`g]bX`Y]b`GW`UhYb`XYf  
A`]b]b[ `!9]bbU`a`Yb`ž`Y]»`h`Yg`]b`XYa`6Yf]W`h"

..

8YhU]`g

6Ygi W\Yb`G]Y`i bg`Ui Z.`\_fmdhc!bYk g"Uh