

Nc fb ][ Yf' \_f]h]g]Yfh' B c` . ; fYi h\ Yf': Øfh\ j Yfd Uggh' Nk Y]h`][ U!Gd]hnY

B UW\ 'Y]bYa 'DUhnYf'j cb'?YYdYf' B c` j Yfd Uggh': Øfh\ 'XYb Gdfi b[ 'Ub'X]Y 'HUVY`Ybgd]hnYžk Å\ fYbX' HfU]bYf' Nc fb ][ Yf gY]bYb 'Hc fk Ufh'gW\ UfZ' \_f]h]g]Yfh"

⇒ 'FU\ a Yb'Y]bYg'gdUbbYbXYb'Gd]Y`g`]b'XYf' &"6i bXYg`][ U\ Uh XYf'G7'DUXYfVc fb'Xi fW\ 'Y]bYb'gdÅhYb'5i g[ 'Y]W\ 'XYb'; fYi h\ Yf : Øfh\ 'Y]bYb'a Ø[ 'Y]W\ Yb'G]Y[ 'j Yfa Uggh'Y'h': Øfh\ g'Hc f\ ØhYf' B U\ i Y` B c` `[ Yf]Yh' ]b'X]Y'GW\ i gg` ]b]Y'gY]bYf'? f]h]\_ž'bUW\ XYa 'Yf'Y]bYb YbhgW\ Y]XYbXYb': Y\ 'Yf'[ Ya UW\ h'\ UhYž'XYf'`Yhnh']W\ 'ni a '%.% ZØ\ fhY"'8]YgYg'a ]ggfUhYbY'Gd]Y`k Uf'b]W\ h'bi f'ZØf' B c` `Y]bY X]fY\_ hY' < YfUi gZc fXYfi b[ ž'gcbXYfb'ghY`hY'Ui W\ 'X]Y'5a V]h]cbYb XYg'HYUa g]b': fU[ Y"

5a 'j Yf[ Ub[ YbYb'GUa ghU[ 'k Uf'XUg'A UhW\ 'ja 'GhUX]cb'XYg'Gdcfh! 7'i Vg'a ]h' ]bhYbg]j Yb'A ca YbhYb'i bX'XfUa Uh]gW\ Yb'K YbXi b[ Yb [ Ygd]W\_h"'8Yf': Øfh\ Yf'? Ud]hÅb'6fUb]a ]f' < f[ chU'gcf[ hY' ]b'XYf nk Y]hYb' < U'VnY]h'Xi fW\ 'Y]bY'dfÅn]gY'J c fUfVY]h'ZØf'X]Y'7\ UbW\ 'XYg Gd]Y`gž'X]Y' @ W\ 'hYf' ]b'XYf' ( - "A ]bi hY'ni f': Ø\ fi b[ 'j Yfk UbXYb' \_cbbhY"'8cW\ 'XUg'; `ØW\_ gc`hY'b]W\ h'Ui Z'GY]hYb'XYf'; Ugh[ YVYf V`Y]VYbž'XYbb' B c` `g'Zc` [ YbXYf'DUhnYf'k Å\ fYbX'Y]bYg'5VgW\ `U[ g `Y]hYhY'gW\ `Y» `]W\ 'XYb'5i g[ 'Y]W\ 'ZØf'DUXYfVc fb'Y]b"'8]Yg'\ UhY ni f': c` [ Yž'XUgg'XYf'HfU]bYf'5`YI UbXYf' Nc fb ][ Yf'ghUf'\_Zfi ghf]Yfh k Uf'i bX' B c` `ÖZYbh]W\ 'k UfbhY"

Nc fb ][ Yfg'gW\ UfZY' ? f]h]\_

B UW\ 'XYa 'Gd]Y`f]W\ hYhY'g]W\ 'X]Y'5i Za Yf\_gUa \_Y]h'gW\ bY`Ui Z Nc fb ][ Yfž'XYf'gY]bYb' ↑ b[ Yb'Gd]Y`Yf'gW\ UfZ' \_f]h]g]YfhY"' 8 Ug ]gh Y]bY' ]bU\_nYdhUV'Y'G]hi Uh]cbž'XUg'XUfZ'gc`b]W\ h'dUgg]YfYb' ž'gU[ hY

XYf`HfU]bYf`j YfÅf[ Yfhž`i bX`ZØ[ hY` ]bni ž`XUgg`gc`WXY` : Y`Yf`b]W h  
hc`Yf]Yfh`k YfXYb" `@Ui hiNc`fb][ Yf`g]Y`h`XYf`l a [ Ub[ `Y]b][ Yf`† b[ Yf  
Gd]Y`Yf`a ]h`XYf`G]hi Uh]cb`c`Zhi Uffc[ Ubh`Ui gž`k Ug`]\b`a U»`cg  
Åf[ YfY" `9f`ghY`hY` \_`Ufž`XUgg`Bc`ž`gc`hY`Yf`X]YgYb` : Y`Yf`  
k ]YXYf`c`Ybž`Yfbgh`UZhY`?`cbgYei YbnYb`ni`Yfk UfhYb`Å`hYž`X]Y  
Ui W`gY]bY`9]bgUhnY]hYb`VYhfYZZYb`\_`ÖbbhYb"

8]YgY`G]hi Uh]cb`k ]fZi`Y]b`@]W`h`Ui Z`X]Y`<`YfUi gZc`fXYfi b[ Ybž`XYbYb  
g]W`Ui ZghfYVYbXY`HU`Yb`hY`[ Y[ YbØVYfgY`Yb" `9g`V`Y]Vh  
UVni k UfhYbž`c`V`Bc`Ui`g`X]YgYa`J`cfZU`YfbYb`\_`Ubb`c`XYf`c`V  
gY]bY`Dcg]h]cb`U`g`GhUa`a`\_`YYdYf`Ui Z`XYf`?`ddY`ghY`Yb`\_`ÖbbhYb"  
8]Y`8]g`\_i`gg]cb`i`a`XYb`Hc`fk Ufh`nY][ hž`k ]Y`k ]W`h][ `YXYf`Y]bnY`bY  
Gd]Y`Yf`]b`Y]bYa`HYUa`gY]b`\_`Ubbž`]bgVYgc`bXYfY`]b`Y]bYa`gc  
\_ca`dYh]h]j Yb`l`a`Z`X`k ]Y`XYf`&"`6i`bXYg`][ U"

⊖`Y]bYf`UbXYfYb`DUfh]Y`Yf`YVhY`XYf`%":`7`?`U]gYfg`Ui hYfb`Y]bYb  
fi` \][ Yb`YXc`W`YfZc`[ fY]W`Yb`BUW`a`]hU["`8Yf` :`7?`\_`c`bbhY  
Ui`gk`Åfhg`[ Y[ Yb`DfYi`»`Yb`A`ØbghYf`a`]h`%`\$`X]Y`C`VYf`UbX  
[ Yk`]bbYbž`i`bX`F`U[ bUf`5W`Y`k`i`fXY`ni`a`A`UhW`k`]bbYfž`U`g`Yf`]b  
XYf`,`\*`"A`]bi`hY`XUg`Yb`hgW`Y]XYbXY`Hc`f`Yfn]Y`hY" `8]Y  
Y]b[ YgW`fÅb`\_hY`8i`fW`gW`U[ g`fUZh`XYf`<`Y]a`a`UbbgW`UZhž`VYX]b[ h  
Xi`fW`XYb`5i`gZU`XYg`j`Yf`YmhYb`A`U`\_`6Uha`Unž`Y]»`\_`Ui`a  
7`UbW`b`Ui`Z]b`UbXYfYg`9f[ YVb]g" `?`U]gYfg`Ui hYfbg`?`Ud]hÅb  
A`Uf`c`b`F`]hYf`c`VhY`5W`Y`U`g`Y]bYb`Gd]Y`Yfž`XYf`]a`a`Yf`ni`f`GhY`Y  
]ghž`k`Ybb`Yg`XUfUi`Z`Ub`\_ca`a`h"

## 6Yf`]bYf`9fZc`[ `XUb`\_` ,`VYfnU` \`

<Yfh`U`6G7` \]b[ Y[ Yb`nY][ hY`]a`C`ma`d]UghUX]cb`Y]bY`UbXYfY`5fh  
j`cb`?`Ua`dZ[ Y]gh" `Hf`cn`Y]bYg`F`ØW`ghUbXg`i`bX`Y]bYg`gW`k`UW`Yb  
GhUfhg`[ Y`Ub[ `XYb`6Yf`]bYfb`Y]b`Yb`hgW`Y]XYbXYf`G]Y[ [ Y[ Yb`X`b  
FY[ YbgVi`f[ ž`XYf`j`cf`U`Ya`Xi`fW`X]Y`F`chY`?`UfhY`ZØf`A`Ubgci`f  
Ci`fc!`HU[ VU]b`XYf`+`\*`"A`]bi`hY`]b`X]Y`<`Ø`Y`[ YgW`fUi`Vh`k`i`fXY"  
GdÅhY`Hc`fY`j`cb` :`Y`l` ;`YV`UfXh`i`bX` :`c`f]Ub`B]YXYf`YW`bYf  
gcf[ hYb`ZØf`9f`Y]W`hYfi`b[ `VY]`XYb`6Yf`]bYfbž`X]Y`g]W`]b`XYf  
HUVY`Y`]a`a`Yf`a`Y`f`Z`YghgYhnYb"

8cW`Ui`W` \]Yf`V`Y]VYb` :`fU[ Yb`c`ZYb" `8Yf`5V[ Ub[ `j`cb`<`Uf]g

HUVU\_cj ]WžXYf'ZØf' [ fc» Y'A Y'Xi b[ Yb'gcf[ hYž' ]Y» 'g]W\ VY]' < Yfh\ U  
 b]W h][ bcf]YfYb" '8Yf'K YW\gY`ni ' <cZYb\Y]a ' \_ØbbhY'gck c\`ZØf  
 X]Y'A UbbgW UZh'U'g'Ui W\ ZØf'XYb'Gd]Y`Yf'gY`Vgh'YbhgW Y]XYbXY  
 5i gk ]f\_i b[ Yb'\UVYbž'X]Y ]b'XYb'\_ca a YbXYb'Gd]Y`Yb'gdØfVUf  
 k YfXYb'\_ØbbhYb"

Gd]Y`Yf	J YfY]b	Hcf
B U\i Y`B c``	; fYi h\Yf': Øfh\	DUhnYf
@ WU' #hYf	; fYi h\Yf': Øfh\	%
F U[ bUf'5WXY	%": 7 '?U]gYfg'Ui hYfb	%
: `cf]Ub	< Yfh\ U'6G7	%
B ]YXYf'YW\ bYf		

8]Y'&"'6i bXYg`][ U`V`Y]Vh'gdUbbYbXž'i bX`YXY'DUfh]Y`\Uh']\fY  
 Y][ YbY'; YgW\W\hY": Øfh\ g'HfU]bYf'Ncfb][ Yf'a i gg'bi b`X]Y  
 f]W\h][ Yb'K cfhY`Z]bXYbž'i a `gY]b'HYUa `ni `a ch]j ]YfYb'i bX'j cf  
 U`Ya ži a `gY]bYb'Hcfk Ufh'XUni `ni `Vf]b[ Ybž'Ui g'gY]bYb': Y\`Yfb  
 ni ``YfbYb" '9g`V`Y]Vh'UVni k UfhYbž'cV`XYf'8fi W\_\`Y`ZYb'cXYf'Y\Yf  
 gW\UXYb`k ]fX"

## 5\_hi Y`Y`9b hk ]W\_\`i b[ Yb`]b`XYf'&"'6i bXYg`][ U

8]Y'&"'6i bXYg`][ U`\Uh]b`X]YgYf'GU]gcb`ZØf`Y]b][ Y`\_ VYffUgW\i b[ Yb  
 [ Ygcf[ hž'b]W\h'ni `Ymh'Xi fW\`X]Y`\Y]» Yb'8i Y`Y`i a `X]Y  
 HUVY`YbZØ\fi b[ "'8Yf'G7`DUXYfVcfbž'XYf'g]W\`bUW\`Y]bYf'ghUf\_Yb  
 `YmhYb'GU]gcb`U`g`Y]bYg`XYf'ghÅf\_ghYb'HYUa `g`YhUV`]Yfh`\Uhž  
 VY]Z]bXYh'g]W\`k Y]hYf\]b`Ub`XYf'Gd]hnY`XYf'HUVY`Y" '5\_hi Y`Y`  
 9b hk ]W\_\`i b[ Yb`nY][ Ybž'XUgg`X]Y`A UbbgW UZh'hfchn`XYf'Øb[ ghYb  
 < YfUi gZcfXYfi b[ Yb`i bX`Y]bYg`FYa ]g[ Y[ Yb`X]Y`GdJ [ [ ; fYi h\Yf  
 : Øfh\`X]Y`?cbghUbni`\Uhž'i a `Ub`XYf'Gd]hnY`ni `V`Y]VYb"

⊕`XYf'U\_hi Y`Y`b'GU]gcb`\UVYb`X]Y`bYi Ui Z[ Ygh]Y[ YbYb'HYUa gž'gc  
 k ]Y`DfYi » Yb`A ØbghYfž'GW\k ]Yf][ \_Y]hYbž'g]W\`Ub`X]Y  
 Nk Y]h][ U\_c\_b\_i ffYbn'Ubni dUggYb" '8Yf'bY[ Uh]j Y`HfYbX`XYf  
 A ØbghYfUbYfž'X]Y`V]g\Yf'c\`bY`G]Y[ `g]bXž'\_ØbbhY': c`[ Yb`ZØf`X]Y  
 HYUa XmbUa ]\_i bX`X]Y`Gh]a a i b[ `XYf': Ubg`\UVYb" 'HfU]bYf  
 GUgW U`<`]Xa Ubb`ghY`h]j cf`XYf`<YfUi gZcfXYfi b[ ž'XUg`J YfhfUi Yb  
 ]b`X]Y`A UbbgW UZh'ni fØW\_ni [ Yk ]bbYb`i bX`Xf]b[ YbX`VYbØh][ hY

Di b\_hY`ni `gUa a Y`b"

## GhUh]gh]\_Yb `ni f`GU]gcb `&\$&' #&(<

5\_hi Y`Y`GhUh]gh]\_Yb`VY`Y[ Yb`X]Y`@]ghi b[ gi bhYfgW\]YXY`]b`XYf  
@[ U"6]g`ni a`Ym][ Yb`NY]hdi b\_h`\UVYb`Y]b][ Y`A UbbgW\UZhYb`Y]b  
VYUW\h]W\Yg`Hcfj Yf\`À`hb]gž`k À`fYbX`UbXYfY`\]bhYb`Ui Z`XYb  
HUVY`Yb`f`Àb[ Yb`ZYghghY`W`\_Yb"8Yf`G7`DUXYfVcfb`\Uh`bUW\`j`]Yf  
[ Ygd]Y`hYb`Gd]Y`Yb`VYfY]hg`Y]bY`HcfX]ZZYfYbn`j`cb`Ž` ) ž`k Ug`]fY  
C`ZYbg]j`Y`ghUf`\_`i`bhYfghfY]W\h"æ` ; Y[ YbgUhn`XUni`VYZ]bXYb`g]W\  
X]Y`DfYi`»`Yb`A`ØbghYf`a`]h`Y]bYa`Hcfj Yf\`À`hb]g`j`cb`!'` ]b`Y]bYf  
gW\k`]Yf][ Yb`@U[ Y"

<]Yf`Y]bY`,`VYfg]W\h`ØVYf`Y]b][ Y`U\_hi Y`Y`GhUh]gh]\_Yb.

HYUa Gd]Y`Y G]Y[ Y B]YXYf`U HcfY ; Y[ Ybh HcfX]ZZY  
[ Yb cfY fYbn

G7`DUXY fVcfb	(	&	%	-	(	Ž` )
<Yfh\U 6G7	(	%	%	*	)	Ž` %
; fYi h\Y f` : Øfh\	(	%	&	(	)	!%
DfYi » Yb A ØbghYf	(	\$	&	&	)	!'

8]YgY`8UhYb`j`YfXYi`h]W\Yb`X]Y`[ Y[ Ybk`Àfh][ Y`G]hi`Uh]cb`]b`XYf  
@[ Už`X]Y`ghUf`\_`j`cb`XYf`9ZZ]n]Ybn`]b`XYf`C`ZYbg]j`Y`i`bX`XYf  
GhUV`]h`Àh]b`XYf`8YZYbg]j`Y`UV`\`Àb[ h"6Y]`k`Y]hYfYb`Gd]Y`Yb`k`]fX  
g]W\`nY][ Yb`ž`c`V`A`UbbgW\UZhYb`k`]Y`<Yfh\U`6G7`i`bX`XYf`%":`7  
?U]gYfg`Ui`hYfb`]fY` :`cfa` \U`hYb`\_`ØbbYb`ž`i`a`ZØf`GdUbbi`b[ `]a  
cVYfYb`HUVY`Yb`Xf]hY`ni`gcf[ Yb"

6Ygi W\ Yb 'G]Y 'i bg 'Ui Z. 'X]Y!b UW\ f]W\ hYb "bYh