

## \* '9][ YbgW UZhYbž'X]Y'X]Y'a YbgW`]WY B Uhi f'XYZ]b]YfYb

6Y]Y]bYf'K UbXYfi b[ 'ØVYf'X]Y'g'U'8Y''Gc''b'6c''j ]Yb'j cf  
Y]b'dUUf'đ\FYb'\UVY']W'a ]W'ni a 'YfghYb'A U'[ YZFU[ hž'k ]Y  
j ]Y'Y'H]YfY'ni a 'JYf[ bØ[ Yb'gdUn]YfYb'[ Y\Yb' 'b]W'h'i a 'ni  
'U[ Yb'cXYf'ni 'ZØhYfbž'b]W'h'i a 'GW'i h'n'cXYf'K Åfa Y'ni  
Z]bXYbž'gcbXYfb'i a 'XUg'; Y\Yb'Ub'g]W'ni '[ Yb]Y»Yb"≠W  
\UVY'X]Y': fU[ Y'Ui Z'E i cfU'ni 'Y\Yf'i bVYZf]YX][ YbXYb  
9f[ YVb]ggYb'[ YghY''h''8]Y': fU[ Y'hUi W'hY'VY]'i bgYfYf  
\_Øfn']WYb'5VY!HUga Ub!K UbXYfi b[ 'YfbYi h'Ui Zi bX'ZØ\fhY  
a ]W'ni 'XYf': fU[ Yž'k Y'WY'UbXYfYb'9][ YbgW UZhYb  
Y]bn][ Ufh][ 'cXYf'k Y]h[ Y\YbX'Ui Z'A YbgWYb'VYgWfÅb\_h  
g]bX''8]Yg'ZØ\fhY'a ]W'k ]YXYfi a 'ni 'Y]bYf'U'hYb'5i g[ UVY  
XYg'BYk 'GW]Ybh]gh'A U[ Un]bg'i bX' Ua d^Y''d/

6Y]Y]bYf'K UbXYfi b[ 'ØVYf'X]Y'g'U'8Y''Gc''b'6c''j ]Yb'j cf'Y]b  
dUUf'đ\FYb'\UVY']W'a ]W'ni a 'YfghYb'A U'[ YZFU[ hž'k ]Y'j ]Y'Y  
H]YfY'ni a 'JYf[ bØ[ Yb'gdUn]YfYb'[ Y\Yb' 'b]W'h'i a 'ni 'U[ Yb'cXYf  
ni 'ZØhYfbž'b]W'h'i a 'GW'i h'n'cXYf'K Åfa Y'ni 'Z]bXYbž'gcbXYfb'i a  
XUg'; Y\Yb'Ub'g]W'ni '[ Yb]Y»Yb"

≠W '\UVY'X]Y': fU[ Y'Ui Z'E i cfU'ni 'Y\Yf'i bVYZf]YX][ YbXYb  
9f[ YVb]ggYb'[ YghY''h''8]Y': fU[ Y'hUi W'hY'VY]'i bgYfYf'\_Øfn']WYb  
5VY!HUga Ub!K UbXYfi b[ 'YfbYi h'Ui Zi bX'ZØ\fhY'a ]W'ni 'XYf  
: fU[ Yž'k Y'WY'UbXYfYb'9][ YbgW UZhYb'Y]bn][ Ufh][ 'cXYf  
k Y]h[ Y\YbX'Ui Z'A YbgWYb'VYgWfÅb\_h'g]bX"

8]Yg'ZØ\fhY'a ]W'k ]YXYfi a 'ni 'Y]bYf'U'hYb'5i g[ UVY'XYg'BYk  
GW]Ybh]gh'A U[ Un]bg'i bX'Y]bYf'ZUgn]b]YfYbXYb'FY]\Y'j cb'5fh]\_Y'b  
ØVYf'X]Y'gYW'g'8]b[ Yž'X]Y'U''Y'A YbgWYb'hi b''9]b][ 'Y'g]bX  
cZZYbg]W'h]W'ž'UbXYfY'g]bX'Ua ØgUbh''5''Y''ØgYb'Y]bYb'FUi gW'XYf

5bYf\_Ybbi b[ 'i bX'Y]b'Ni [ Y\Öf][ \_Y]hg[ YZØ\`'Ui g"

## %" `J Yfgd]Y`h'gY]b

G]Y` \ UVYb`j ]Y`Y]W h'gW cb`XUj cb` [ Y\Öfhž`XUgg`A YbgW Yb`i bX  
8Y`Z]bY`X]Y`Y]bn][ Yb`5fhYb`g]bXž`X]Y`g]W`ni a` J Yf[ bØ[ Yb`dUUfYb"  
8]Yg`]ghž`j ]Y`Y]W h'k Yb][ `ØVYffUgW YbXž`b]W h'k U\ f" `A Y\ fYfY  
UbXYfY`H]YfY` \ UVYb`GYI ž`k Ybb`Y]bY` : cfhdZUbni b[ 'i ba Ö[ `]W  
cXYf`i bk U\ fgW Y]b`]W` ]gh" `hYfYggUbh`]ghž`XUgg`bi f`k Yb][ Y  
UbXYfY`5fhYb`]a` 5` `[ Ya` Y]bYb`gc`j` Yfgd]Y`h'g]bX`k` ]Y`A YbgW Yb"

`U`h1` I fcg!gW`k`ja` a` YbXY!`h`gY`b`!H]h]WUWU!GYY` 2`5h`Ug`/` `6c`chg`  
: fUi`Yb`h`Ub`n`Yb`Ua` `H]h]WUWUgYY` ]b`DYfi`

5`Y`GÄi` [ Yh]YfY`gd]Y`Yb`ž`gU[ h`B`Yk` `GW]Yb]ghž`UVYf`\_Y]bY`UbXYfY  
GdYn]Yg`j` YfZc` [ h`Y]bY`gc` [ fc`»`Y`J` ]Y`ZU`h`Ub`I` bhYf`U`hi` b[ `c`XYf`  
j`YfVf]b[ h`gc`j` ]Y`NY]h`XUa` ]hž`g]W`ni` `Ua` Øg]YfYb"

K` ]f` [ Yb]Y`»`Yb`b]W h`bi` f`\_ÖfdYf`]W`Y`5`\_h]j` ]h`h`Yb`f`Gdc`fhž`Gd]Y`Yž`  
HUb`n`Yb`i` bX`gc` [ Uf`?` ]h`Y`b`ł`ž`gcb`XYfb`gd]Y`Yb`Ui` W`a` ]h`GdfUW`Y`  
fK` ]h`Y`a` UW`Yb`ž`A`i`g]\_`a` UW`Yb`ł`i` bX`bi` h`Yb`i` bgYfY`  
J`cfghY`i` b[ g`\_fUZh`K` ]f`hfU[ Yb`i` bgYfYb`\_]bX`]W`Yb`G]bb`ZØf`  
J`Yfgd]Y`h`Y]h`V]g`]bg`9fk` UW`gYbYbU`h`Yfž`k` Ug`VY]`UbXYfYb`GdYn]Yg`  
gY`h`Yb` ]gh"

## &" `K` ]ggYb gW UZh`]W`gY]b

5`g`?`]bXYf`YfbYb`k` ]fž`A`i` ghYf`ni` `Yf`\_YbbYb" `K` ]f`\_ÖbbhYb`U`Y`  
fchYb`@Y[ cghY]bY` ]XYb]Zn]YfYb`i` bX` [ fi` dd]YfYb`cXYf`Yf`\_YbbYbž`  
XUgg`Y]b`nk`Y]hY`][ Yf`GhY]b`ØVYf`Y]bYa` `UbXYfYb`nk`Y]hY`][ Yb`  
GhY]b`g]hnh" `K` ]f`ghY`Yb`ZYghž`XUgg`k` ]f`X]Y`K` Y`h`gh`bX][ `]b`  
?UhY[ cf]Yb`gcfh]YfYbž`j` cf`Y`fgU[ Ybž`k` ]Y`X]Y`8]b[ Y`Zi` b\_h]cb]YfYbž`  
i`bX`i` bgYfY`J`cf`Y`fgU[ Yb`h`YghYb"

`U`h1` 2`5h`Ug`/` `6c`chg`9]b`Y]a` ]gW`Y`V]bXYb`GW`]Zi`a`  
: i`bXUa` YbhY`Ui`Z`XYb`gW`k`ja` a` YbXYb`h`gY`b`XYf`I`fcg`]b`DYfi`ni`  
`Y[ Yb`

8 ]Ygž'gU[ h'BYk 'GW]Ybh]ghž']gh'XUg'Y][ Ybh]WXY'K YgYb'XYf  
K ]ggYbgW UZh'i bX'nY][ h'g]WXY'j b'U`Ya žj cb'XYf': Ygh'Y[ i b[ 'j cb  
NY]hi bX' ? U`YbXYfb'V]g` \b'ni 'i bgYfYf'J Yfk YbXi b[ 'j cb  
A U»Y]b\Y]hYb'i bX'i bgYfYa 'GhfYVYb'bUWXY'cga ]gWXYa 'K ]ggYb"

' " '@Y[ ]g`Uh]j 'gY]b

J ]Y`Y`H]YfY`\U`hYb'g]WXY'Ub'Y]bZUWXY'J Yf\U`hYbgfY[ Y`b'fb'Zh]b  
6Yni [ 'Ui Z'HYff]hcf]i a 'i bX'<]YfUfWXY]Yž'UVYf'\_Y]bYg`\Uh'Y]b  
Ui g[ Y\_Ø[ Y`hYg'GmghYa 'j cb'FY[ Y`bž'HUVi g'i bX'9h]\_YhY'k ]Y`XUg  
XYg'A YbgWXYb"

C \bY`YXY'; Ya Y]bgWXYUZh'Ui Z'XYf'K Y`h'ni 'ghi X]YfYbž'\_ÖbbYb'k ]f  
b]WXYh'a ]h'G]WXYf\Y]h'gU[ Ybž'cV`YXY'Y]bnY`bY'Zcfa Y`Y'; YgYhNY  
\Uhž'UVYf'A YbgWXYb'bY][ Yb'j cb'BUhi f'Ui g'XUni ž'FY[ Y`b'ni  
\UVYb"8]YgY'FY[ Y`b'VY]b\U`hYb'ja a Yf'XUg'J Yf\U`hYb'j]b'XfY]  
GWXY'ØggY`VYfY]WXYbž'Y]b'NY]WXYb'XUZØfž'XUgg'X]Y'; YgYhN[ YVi b[  
j cb'[ fi bX'Y[ YbXYf'6YXYi hi b[ 'ZØf'X]Y'a YbgWXY]WXY'BUhi f'j]gh"

8 Ug'YfghY' ]gh'X]Y'J Yfk UbXhgWXYUZh'X]Y'FYWXYhYž'; ØhYf'i bX'XYf  
GhUhi gž'X]Y'Y]bYa 'ni ghY\Ybž'i bX'Ui WXY'X]Y'J YfdZ]WXYh' b[ ž'X]Y'a Ub  
[ Y[ YbØVYf'gY]bYb'J Yfk UbXhYb'\Uh'fh"6"Y]bY'HcWXYhYfž'X]Y'@UbX  
j cb']\YfY'A i hYf'YfVhž'cXYf'Y]b'J UhYfž'XYf'[ YgYhN]WXY'j YfdZ]WXYhYh  
]ghž'ZØf'gY]bYb'Gc\ b'ni 'gcf[ YbŁ"

5b'nk Y]hYf'GhY`Y'ghY\h'X]Y'G]WXYf\Y]h'»XYf'gcf[ h'g]WXY'i a 'X]Y  
G]WXYf\Y]hž'XU\Yf'\Uh'YXY'?i'hi f'FY[ Y`bž'X]Y'fY[ Y`bž'k Ubb  
Ya UbX'Y]bY'UbXYfY'DYfgcb'hØhYb'cXYf'j Yf'YhNYb'XUfZ"

8 f]hYbg' ]gh'X]Y'Bi hmi b[ 'j cb'CVY`hYb.'8]Y'8YZ]b]h]cb'j cb  
Df]j UhY][ Ybhi a ' ]gh'U`Yg'UbXYfY'U`g'i b]j YfgY`ž'UVYf  
; YgY`gWXYUZhYb'\UVYb'ØVYfU`FY[ Y`bž'X]Y'VYgh]a a Ybž'k Yf  
VYgh]a a hY'8]b[ Y'ni 'VYgh]a a hYb'NY]hYb'bi hNYb'XUfZ'i bX'k Yf  
b]WXYh"

( "'; Yb]Y» Yf'gY]b

: Øf'X]Y'a Y]ghYb'H]YfY' ]gh'Y]bY'A U\`nY]h'bi f'Y]bY'A U\`nY]h'Y]bY

A Ò[ `]W\_X]h`]\fYb`? ÒfdYf`ni `Yf\U`hYbž`XUa `]h'g]Y`k`Y]hYf`YVYb  
\_ÒbbYb": Øf`A YbgW\_XYb`\_Ubb`Y]bY`A U`nY]h`Y]bY  
<YfnYbgUb[ Y`Y[ Yb\Y]hž`Y]b`?i bghk Yf\_ž`Y]b`J`Y\`\_Y`XYf  
J`YfZØ\fi b[ ž`Y]b`9fY][ b]g`Ub`i bX`ZØf`g]W`gY]b": fYi bXY  
j`YfgUa`a`Y`b`g]W`ž`i`a`'6fch`ni`VfYW\_XYbž`k`À`fYbX`: Ua`]]Yb`Ua  
9ggh]gW` ; YgW\_X]W`hYb`Yfn`À`Yb`i bX`g]W`ghfY]hYb"

B`UhØf`]W`]gh`Yg`b]W`h`bi`fi`bgYfY`9]bghY`i`b[ `ni`a`'9ggYbž`X]Y`i`bg  
Ui`gnY]W`bYh`'8`Ug`?`cW\_XYbž`Y]bY`XYf`[`fÒ»`hYb`9fZ]bXi`b[`Yb`XYf  
A`YbgW\_X]hž`\Uh`Y]bYb`[`fc»`Yb`i`bhYfgW\_X]YX`[`Ya`UW`h"

`U`h1` B`UW`h]`j`cb!`XfY]!`8`YggYfhg`2`5`h`Ug`/`'6`c`chg`?`]U`Yfk`À[`h`XfY]  
8`YggYfhg

8`Yf`Df]a`Uh`c`[`Y`F`]W`UfX`K`fUb[`\Ua`'j`cb`XYf`<`Ufj`UfX`i`b]j`Yfg]hm  
gU[`hž`XUgg`[`Y`\_`cW\_X]hYg`9ggYbž`XUg`a`Y`f`?`U`cf]Yb`i`bX`k`Yb][`Yf  
?`Ui`Yb`V]YhYhž`X]Y`GW\_XØggY`]bbc`j`Uh]cb`k`Ufž`X]Y`Yg`i`bgYfYb  
J`cfZU`fYb`Yfa`Ò[ `]W\_X]hYž`g]W`ni`]b`hY`][`Yb`hYbž`gcn]U`Yb`?`fY`Uhi`fYb  
ni`Yb`hk`]W`Y`b"

9f`ghY`h`ZYghž`XUgg`GW\_X]a`d`Ub`gYb`a`Y`f`U`g`gYW\_X]g`Ghi`bXYb`Ua`'HU[  
a`]h`?`Ui`Yb`j`YfVf]b[`Yb`/`A`YbgW\_XYbž`k`Yb][`Yf`U`g`Y]bYfž`XYf`a`Y`f`  
NY]h`ZØf`?`i`h`i`f`i`bX`9b`hk`]W`i`b[`'À`ggh"

)`" `b`6`Yni`[`'Ui`Z`GYI`'\`Y]a` `]W\_X]gY]b

9g`k`Uf`XYf`6`Ygi`W\_X]Yg`Ni`W\_X]hYb`hfi`a`g`Ui`Z`GUb`7`f]gh`VU`Ui`Z`XYb  
;`U`½`dU[`cg]`b`gY`bž`XYf`a`Y]bY`A`Y]bi`b[`ØVYf`GW\_X]X`f`ØhYb  
À`bXYfhY`"6]g`XU\]b`gU\`]W\_X]g]Y`U`g`k`Y]gY`i`bX`gUb`ž`hY` ; YgW\_X]Ød`ZYž  
X]Y`Ub[`gUa`'i`bX`j`c`fg]W\_X]h][`Xi`fW\_X]g`@YVYb`ghUd`ZYb`"B`UW\_X]Y`a  
6`Ygi`W\_X]j`Yfk`Ub`XY`hYb`g]Y`g]W\_X]b`f]Yg][`Yž`[`Y]Y`?`fY`Uhi`fYbž`X]Y`]b  
XYf`²`ZYb`h]W\_X]h`Ui`hYbž`[`fi`bnYb`XYb`i`bX`i`b`UhhfU`\_h]j`Yb`GYI  
\`UhhYb"

8`Ug`i`bhYfgW\_X]Y]XYh`g]Y`b`UhØf`]W\_X]b]W\_X]h]`cb`Ub`XYfYb`@YVYk`YgYb  
Ui`»`Yf`A`YbgW\_XYbž`X]Y`GYI`]YVYf`df]j`Uh`\UVYb`"A`Ub`\_Òbb`hY`gU[`Ybž  
XUgg`X]Yg`Ui`Z`U`f`i`bXYfhY`Ub[`Y`gcn]U`Y`?`cbX]h]cb]Yfi`b[  
ni`fØW`ni`ZØ`fYb`]ghž`UVYf`K`]ggYbgW\_X]Už`Yf`j`Yfa`i`hYb`Y]bYb

h]YZfYb'; fi bX"; Y\Y]a Y'DUUfi b[ 'Z]bXYh'nk ]gWXYb'5fhYb'a ]hj ]Y`  
?cb\_i ffYbn'nk ]gWXYb'XYb'A ÅbbWXYb'ghUhh'gU[ h'7`]] Y`K mbbYž  
DfcZYggcf'ZØf'DgmWxc`c[ ]Y'Ub'XYf'i b]] Yfg]hmicZ: `cf]XU"

8cbU'X'Gma cbgž'5bh\fc d'c[ Y'i bX'5i hcf'j cb'H\Y'9j c'i h]cb'cZ  
<i a Ub'GYI i U`]hmž'gU[ hž'XUgg'A ÅbbYf'GYI 'U'g'\_cghVUFYg'; i h  
VYhfUW hYb'i bX']\b'XU\Yf' \Y]a `]W [ Yb]Y»Ybži a  
6Y[ Y\f']W\_Y]hYb'ni 'j Yfa Y]XYb "

<Ufj UfX!DfcZYggcf'GhYj Yb'D]b\_Yf'gh]a a h'XYa 'ni .: 8Ug']gh'Ui g  
XYa ' [ 'Y]WXYb'; fi bXž'Ui g'XYa 'k Å\fybX'Y]bYf'<i b[ Yfgbch'YXYfž  
XYf'Yhk Ug'ni 'YggYb'\Uhž'Yg'k U\fgWXY]b`]W 'df]] Uh'\_cbgi a ]Yfh"

?i fn[ YgU[ hž'Yg']gh'b]W h'GWUa ž'X]Y'X]Y'\Y]a `]WY'?cdi `Uh]cb  
UbhfY]Vhž'gcbXYfb'BY]X'i bX'?cb\_i ffYbn"

## \* "'HfUhgW ][ 'gY]b

9g'[ ]Vh'Y]bYb'n]Ya `]W 'i bZfYi bX`]WXYb'?ca a YbhUf'Y]bYf  
?c'i a b]gh]b'ØVYf'X]Y'Vf]h]gWXY'GWU i gd]Y'Yf]b'?Y]fU'?b][ \hYm  
K Ybb'G]Y'g]W'a ]h'Y]bYf': fUi 'UbZfYi bXYb'k c`Ybž'ghY`Yb'G]Y']\f  
X]Y': fU[ Y.' K Ug'\U'hYb'G]Y'j cb'?Y]fU'?b][ \hYm3 'ϕ'XYa 'XUfUi g  
fYgi `h]YfYbXYb'Ghfca 'Ui g'; U`Y'i bX'5VgWXYi 'k ]fgh'Xi 'X]W  
j YfV]bXYb"

'U'h1 F Y]gYZ\][ [\_Y]hYb.'A ]h: fYa XYb'gd fYWXYb 2 5h'Ug/ '6cchg  
9]b\Y]a ]gWXY'hfYZZYb'g]W'a '7UZÅ'9': ]g\Uk m]b'?U]fc

9g']gh'k U\f.'A YbgWXYb'VYbi hnYb'?`UhgW'ži a '6Yn]Y\i b[ Yb'ni  
ZYgh][ Ybž'gU[ h'F'cV]b'8i bVUfž'5i hcf'j cb'; fcca ]b[ ž'; cgg]d'UbX  
h\Y'9j c'i h]cb'cZ@Ub[ i U[ Y"'9f'[ `Ui Vhž'XUgg'?`UhgW'XUg  
a YbgW`]WY'Yei ]j U'Ybh'ni f'Df]a UhYbdZY[ Y'gh"

K ]f'\UVYb'ni 'j ]Y'Y'6Yn]Y\i b[ Ybži a 'g]Y'Xi fW'nY]hUi Zk ÅbX][ Y  
DZY[ Y'Ui ZfYW hni Yf\U'hYbž'U'gc'i bhYf\U'hYb'k ]f'i bg'ghUhhXYggYb.  
'?`UhgW'\Uh'g]W'Yb'k ]W\_Y'hž'i a 'X]Y'FÅXYf'XYf'gcn]U'Yb  
ϕhYfU\_h]cb'ni 'Ø`Yb ž'gU[ h'8i bVUf'`Y]bY'A UI ]a Yž'X]Y'ZØf'U`Y'[ ]hž  
j cb'GW i `\_]bXYfb'V]g'ni 'XYb'a ÅW h][ ghYb': Ø\fyfb'XYf'K Y'h"

hYfYggUbh]ghž'XUgg?'`UhgWw`b]Ww.hj cb`BUhi f`Ui g`bY[ Uh]j `]gh"6Y]  
gY]bYb`FYWwYfWwYb`ghY`hY`8i bVUf`ZYghž'XUgg`bY[ Uh]j Y  
?ca a YbhUfY`k Y]hUi g`gY`hYbYf`k UfYb`U`g`Ufa `cgY  
6YcVUWw hi b[ Yb`ni `Y]bYa `H\Ya U" a `K YgYbh]WwYb`]gh`Yg`b]Ww h  
gcž'XUgg`k ]f`[ YfbY`a YW\_Yfb/'9g`]gh`bi f`gcž'XUgg`k ]f`[ YfbY`fYXYb"  
9g`gY]'XYbb`bUhØf`]Wwž`Yg`[ Y`h`i a `?Y]fU`?b][ `h`Ym"

@Y]hV]'X.`8fYUa gh]a Y

.

8YhU]`g

6Ygi WwYb`G]Y`i bg`Ui Z.`Y]bY!fY]gY"XY