

; YZÄ\ f`]WÅ Y`Gh]ZhY`Ui Z`F UXk Y[ `]b  
NY`h]b[ Yb!F UWÅ h][ .`Dc`]nY]`gi WÅ h`NYi [ Yb

≠`NY`h]b[ Yb!F UWÅ h][ `k i fXYb`F UXZU\ fYf`Xi fWÅ  
F Y]» VfYhhgh]ZhY`Ui Z`XYa`F UXk Y[ `[ YZÄ\ fXYh`Dc`]nY]`gi WÅ h  
NYi [ Yb`

6Y]`Y]bYa`gWÅ cW\_]YfYbXYb`J cfZU``Ua`&%"`5i [ i gh&\$&( `k i fXYb  
Ui ZY]bYa`F UXk Y[ `]b`NY`h]b[ Yb!F UWÅ h][ `F Y]» VfYhhgh]ZhY  
Ui g[ Y`Y[ hž`k Ug`ni`6YgWÅÅX][ i b[ Yb`Ub`a`Y\ fYfYb` : U\ ffÅXYfb  
ZØ\ fhY" `≠g[ YgUa`h`k i fXYb`UWÅ h`F ÅXYf`]b`A`]h`Y]XYbgWÅ UZh  
[ Ync[ Ybž`U`g`\ fY` : U\ fYf`ØVYf`X]Y`[ YZÄ\ f`]WÅ Yb`Gh]ZhY`Zi` \ fYb"  
Gc`WÅ`Y]bY`[ YZÄ\ f`]WÅ Y`< UbX`i b[ ` \ Uh`b]WÅ h`bi`f`a` UhYf]Y`Y  
GWÅÅXYb`ni`f` : c`[ Yž`gcbXYfb`\_ØbbhY`Xi`fWÅ`X]Y` \ c\ Yb  
; YgWÅ k`]bX][ \_Y]hYbž`a`]h`XYbYb`F UXZU\ fYf`i`bhYfk`Y[ g`g]bXž`Ui`WÅ  
ni`Yfbgh\ UZhYb`J Yf`Yhni`b[ Yb`ZØ\ fYb"

8]YgYf`J cfZU``]gh`VYgcbXYfg`VYgcf[ b]gYffY[ YbXž`XU`Yf`b]WÅ h`XYf  
YfghY`gY]bYf`5fh]gh"6YfY]hg`Ua`%"`5i [ i gh&\$&( `\_Ua`Yg`Ua  
[ `Y]WÅ Yb`C fh`ni`Y]bYa`Ä\ b`]WÅ Yb`J cfZU``"8]YgY`k`]YXYf\ c`hY`HUh  
k`]fZh` : fU[ Yb`ØVYf`X]Y`G]WÅ Yf\ Y]h`XYf`F UXZU\ fYf`Ui`Zi`bX`nY][ h`Y]b  
A`i ghYf`Ub`dchYbn]Y``\_f]a`]bY`Ya`J Yf\ U`hYbž`XUg`gWÅ bY`ghYbg  
Ui`Z[ Y`\_`Äfh`k`YfXYb`a`i`gg"

### Dc`]nY]`gi WÅ h`NYi [ Yb

≠`XYf` : c`[ Y`X]YgYg`J cfZU``g`\ Uh`X]Y`Dc`]nY]`6Yfb`\_UghY`!`?`i`Yg`Y]bY  
NYi [ YbUi`Zfi`Z[ YghUfhYhi`bX`V]hhYh`X]Y`6Yj`Ö`\_Yfi`b[ `i`a`Ä`h\`]ZY"  
X`XYfž`XYf`J YfX`gi`gd]W]ci`g`K`U\ fbY\ a`i`b[ Yb`]b`XYf`I`a`[ YVi`b[  
[ Ya`UWÅ h`\ Uh`cXYf`a`Ö[ `]WÅ Yfk`Y]gY`gc[ Uf`≠Zcfa`Uh]cbYb`ØVYf`XYb  
J YfUbhk`cfh]WÅ Yb`\ Uhž`k`]fX`[ YVYhYbž`g]WÅ`ni`a`Y`XYb"8]Y`Dc`]nY]  
\ Uh`XUZØf`Y]bY`gdYn]Y`Y`?`cbhU`\_hghY`Y`Y]b[ Yf]WÅ hYhž`k`c`<`]bk`Y]gY

Ybh[ Y[ Yb[ Ybca a Yb'k YfXYb"

8]Y' ?cbhU\_hUi ZbU\ a Y' \_Ubb'hY`Y Zcb]gW\ 'i bhYf`\$\*)' %!- ) &+\$  
YfZc`[ Yb'cXYf'dYf'9!A U]'Ub'd]VYfb\_UghY`!\_i Yg"X[ `4 dc`nY]"f`d"XY"  
9g]ghj cb'Äi » YfghYf'K ]W\h[ [\_Y]hž'XUgg'dchYbn]Y`Y`NYi [ Yb'X]YgY  
; Y`Y[ Yb\Y]h'bi hnYbž'i a`ni f'5i Z\_`Äfi b[ 'XYg'J cfZU`g`VY]ni hfU[ Yb"  
GW`Y]»`W`[ Y\h'Yg'b]W\h'bi f'i a`X]Y`K ]YXYf\YfghY`i b[ 'j cb  
GW`ÄXYbž'gcbXYfb'Ui W`XUfi a`ž'X]Y`G]W\Yf\Y]h'XYf`F UXZU\ fYf'ni  
[ Yk Ä\ f`Y]ghYb'i bX'k Y]hYfY`Nk ]gW\YbZÄ`Y`ni 'j Yf\]bXYfb"

I a ZUb[ 'XYf`GW`ÄXYb`i bX`F Y`Yj Ubn`XYg  
J cfZU`g`

8]Y`5i g`Y[ i b[ 'j cb'gW\UfZYb'; Y[ YbghÄbXYb'Ui ZF UXk Y[ Yb`nY][ h  
Y]b`Yfbgh\UZhYg'G]W\Yf\Y]hgf]g]\_c`Ui Zž'XUg'b]W\h'[ bcf]Yfh'k YfXYb  
\_Ubb"8]Y`J Yf`Yhni b[ 'XYf`J Yf\_Y\fgg]W\Yf\Y]h'Xi fW`XUg  
UVg]W\h]W\Y`D`Um]YfYb'gc`W\Yf'; YZU\ fYbei Y`Yb`\_ÖbbhY`ZuH`Y  
: c`[ Yb`ZÖf'i bVYgW\c`hYbY`A YbgW\Yb`\UVYb": U\ffUXZU\ fYb`]gh`ZÖf  
j ]Y`Y`Y]bY`VY`YVhY` : fY]nY]hVYgW\ÄZh][ i b[ 'i bX`Y]b`k ]W\h][ Yg  
: cfhVYk Y[ i b[ ga ]hhY`b`XYf`F Y[ ]cb"8]Y`Gcf[ Y`i a`X]Y`G]W\Yf\Y]h  
k i fXY`Xi fW`X]YgY`J cfZÄ`Y`Ui Z'gW\ a Yfn`]W\Y`K Y]gY`j YfghÄf`h"

C ZYbg]W\h]W\`[ ]Vh`Yg`\]Yf`Y]bY`X]fY`\_hY`6YXfc\i b[ 'ZÖf`X]Y  
; Ya Y]bgW\UZhž'i bX`Yg`]ghj cb'[ fÖ» hYf`6YXYi hi b[ ž'XUgg`XYf  
J Yfi fgUW\Yf'[ YZi bXYb`k ]fXž'i a`k Y]hYfY`GW`ÄXYb`ni 'j Yfa Y]XYb"  
8]Yg`\_ÖbbhY`g]W\`Ui W`U`g`bØh`]W\`Yfk Y]gYbž'i a`XUg`J YfhfUi Yb  
XYf`6Øf[ Yf`]b`X]Y`G]W\Yf\Y]hgUi Zg]W\h'i bX`X]Y`6Ya Ø\i b[ Yb`XYf  
Dc`nY]`ni`ghÄf`\_Ybž`Y]bY`g]W\YfY`i a [ YVi b[ 'ZÖf`U`Y  
J Yf\_Y\fgH`Y]`bY\ a Yf'ni`gW\UZZYb"

8]Y`< UfhbÄW\_] [ \_Y]h`X]YgYf`J cfZÄ`Y`]gh`U`Ufa ]YfYbX`/g]Y`ZcfXYfb`X]Y  
VYhfc ZYbYb`F UXZU\ fYf'[ YfUXYni` \YfUi g'i bX`hfU[ Yb`ni f  
J Yfi bg]W\Yfi b[ 'j b`XYf'; Ya Y]bgW\UZh`VY]"8 U\Yf`gc`hYb`b]W\h'bi f  
NYi [ Ybž'gcbXYfb'Ui W`U`Y`F UXZU\ fYfž`Xcfhj cfg]W\h][ 'gY]b`i bX  
]\fY`5i Za Yf\_gUa \_Y]h'k Ä\ fYbX`XYg': U\ fYbg`Yf\Ö\Yb"

5i Z\_`Äfi b[ gUfVY]h'i bX

# DfÀj Ybh]c bga U» bU\ a Yb

I a`ni \_ØbZh][ Y`J cfZÀ`Y`X]YgYf`5fh`ni`j`Yf\]bXYfbž`\_ØbbhY`Yg  
\]ZfY]W\`gY]bž`dfÀj`Ybh]j`Y`A`U»`bU\`a`Yb`i]b`XYb`VYhfc`ZY`bYb  
6YfY]W\`Yb`ni`j`Yfgh`Àf`\_Yb`"8]Yg`\_ØbbhY`X]Y`j`Yfa`Y\`fhY  
,`VYfk`UW\`i`b[`XYg`F`UXk`Y[`Y!B`Yhn`Yg`gck`]Y`X]Y`5i`Z`\_Àfi`b[`XYf  
J`Yf`\_Y\`fghY]`bY\`a`Yf`ØVYf`a`Ø[`]W\`Y`;`YZU\`fYb`i`a`ZUggYb`  
5i`Z`\_Àfi`b[`g\_Ua`dU[`bYb`ØVYf`X]Y`;`YZU\`fYb`j`cb`j`YfhY]`hYb  
;`Y[`Ybgh`Àb`XYb`VY`UghYb`b]W\`h`bi`f`X]Y`6Yhfc`ZY`bYb`ž`gcb`XYfb  
\_ØbbYb`Ui`W\`ni`Y]bYa`gh`Àf`\_YfYb`;`Ya`Y]bg`W\`UZhg[`YZØ\`  
VY]hfU[`Yb`"

@Yhnh`]W\`i`[`]h`Ygž`X]Y`F`UXk`Y[`Y`i`bX`i`[`Ya`Y]bgUa`Yb  
J`Yf`\_Y\`fgZ`ÀW\`Yb`U`g`Y]bYb`C`fh`XYf`G]W\`Yf\`Y]h`ZØf`?`]bXYfž  
9fk`UW\`gYbY`i`bX`GYb]cfYb`i`[`]Y]W\`Yfa`U»`Yb`ni`ZØfXYfb`"Bi`f`Xi`fW\`  
\_c`Y`\_hj`Y`5bghfYb[`i`b[`Yb`\_ØbbYb`gc`W\`Y`UVgW\`Yi``]W\`Yb`HUhYb  
Y]b[`YX`Àa`a`h`k`YfXYbž`i`bX`XYf`GdU»`Ua`F`UXZU\`fYb`]b`NY`h]b[`Yb!  
F`UW\`h][`\_Ubb`Ui`Z]g]W\`YfY`i`bX`gcf[`YbZfY]Y`K`Y]gY`[`Yb`cggYb  
k`YfXYb`"

## J cfZÀ`Y`j`cb`J`UbXU`]ga`i`g`]a GhfU»`Ybj`Yf`\_Y`f`

⊕`XYb`YhnhYb`⊕\`fYb`\`UVYb`g]W\`a`Y\`fYfY`J`cfZÀ`Y`j`cb  
J`UbXU`]ga`i`g`]a`GhfU»`Ybj`Yf`\_Y`f`]b`8Yi`hgW\`UbX`i`[`Y\`Ài`Zh`"8]Y  
UVg]W\`h]W\`Y`;`YZÀ\`fXi`b[`]j`cb`F`UXZU\`fYfb`]gh`b]W\`h`bi`f`Y]b  
?`f]a`]bU`ZU`ž`gcb`XYfb`Ui`W\`Y]b`i`[`YgY`g`W\`UZh]W\`Yg`DfcV`Ya`ž`XUg  
X]Y`G]W\`Yf\`Y]h`Ui`Z`XYb`GhfU»`Yb`]b`i`fU[`Y`ghY`h`"8]Y`Ga`]h\`hU`Y!  
⊕]h]Uh]j`Y`\`Uh`VY]gd]Y`gk`Y]gY`Ui`Z`À\`b`]W\`Y`J`cfZÀ`Y`]b`Ub`XYfYb  
FY[`]cbYb`Ui`Za`Yf`gUa`i`[`Ya`UW\`hž`k`c`[`YZÀ\`f`]W\`Y`C`V`Y`\_hY  
UVg]W\`h]W\`Ui`Z`F`UXk`Y[`Y`[`Y`Y[`h`k`i`fXYbž`i`a`F`UXZU\`fYf`ni  
gW\`ÀX][`Yb`c`XYf`Y]bni`gW\`ØW\`hYfb`"Gc`W\`Y`5\_h]cbYb`nY][`Ybž`k`]Y  
k`]W\`h][`Y`g`]ghž`XUgg`gck`c\`X]Y`2`ZYbh]W\`\_Y]h`U`g`Ui`W\`X]Y  
6Y\`ØfXYb`ni`gUa`a`YbUfVY]hYbž`i`a`X]Y`G]W\`Yf\`Y]hgVYX]b[`i`b[`Yb  
ZØf`F`UXZU\`fYf`ni`j`YfVYggYfb`"

9]bY`i`bhYfgi`W\`i`b[`XYg`8Yi`hgW\`Yb`J`Yf`\_Y`fgg]W\`Yf\`Y]hgfUhYg

fB J F Ł'ja ' ʘ\f'&\$&' \Uh'Yf[ YVYbž'XUgg'Yhk U'%) 'DfcnYbh'XYf  
F UXZU\fyf' ]b'ghAXh]gWYb'; YV]YhYb' ]b'XYb''YhnhYb'nk Y]' ʘ\fyb'a ]h  
J UbXU' ]ga i g'\_cbZfcbh]Yfh'k i fXYb''8]Yg'nY][ hž'XUgg'Yg'g]W' i a  
Y]b'k Y]h'j Yfvfy]hYhYg'DfcV'Ya ' \UbXY'hž'XUg'Xf]b[ YbX'Ub[ Y[ Ub[ Yb  
k YfXYb'a i gg"

## F YW h`]W Y `? cbgYe i YbnYb `i bX GhfUZj YfZc `[ i b [

8]Y'UVg]W h`]W Y'; YZ\fxi b[ 'j cb'DYfgcbYb' ]a 'GhfU» Ybj Yf\_Y\ f  
\_Ubb'VYghfUZ'hk YfXYb''; Ya Å» 'z' ' %) 'V'XYg'GhfUZ[ YgYhnVi WYg  
fGh' 6Ł'\_Ubb'X]Yg'U'g' ; YZ\fxi b[ 'XYg'GhfU» Ybj Yf\_Y\ fg  
Y]b[ Yghi Zh'k YfXYb''8]Y'GhfUZy b'\_ÖbbYb'j cb'; Y'XghfUZy b'V]g'\ ]b  
ni 'a Y\ f'Å\ f][ Yb': fY]\Y]hgghfUZy b'fY]WYbž'Y'bUW'GWk Yfy'XYg  
8Y']\_hg'i bX'XYb'j Yfi fgUW hYb'GW ÅXYb"

8]Y'Dc`nY]'6Yfb\_UghY'!?'i Yg'\Uh'VYfy]hg'9fa ]h'i b[ Yb'Y]b[ Y'Y]hYh"  
5i ZX]Y'K ]W h][ \_Y]h'j cb'NYi [ YbUi ggU[ Yb'k ]fX' ]b'XYb'ÖZYbh]WYb  
5i Zfi Zyb'VYgcbXYfg'\ ]b[ Yk ]YgYbž'XU'g]Y'XUni 'VY]hfU[ Yb'\_ÖbbYbž  
XYb'HÅhYf'ni ' ]XYbh]Zn]Yfyb'i bX'k Y]hYfy'Å\b`]W Y'J cfZÅ`Y'ni  
j Yf\ ]bXYfb''8Yf'GW i hn'j cb'FUXZU\fyfb' ]gh'b]W h'bi f'Y]bY  
dc`nY']W Yž'gcbXYfb'Ui W'Y]bY' [ YgY`gW UZh]W Y'J YfUbhk cfhi b[ ž  
XYbb'YXYf'\_Ubb'Xi fW'5i Za Yf\_gUa \_Y]h'i bX'9b[ U[ Ya Ybh'ni f  
J YfVYggYfi b[ 'XYf'J Yf\_Y\fgg]W Yf\Y]h'VY]hfU[ Yb"

## 2 ZZYbh`]W Y `F YU\_h]cbYb `i bX G]W Yf\Y]hgYf\ Ò\ i b [ Yb

8]Y'J cfZÅ`Y' ]b'NY'h]b[ Yb!F UW h][ '\UVYb'nU\fy]W Y'F YU\_h]cbYb' ]b  
XYf'; Ya Y]bXY'i bX'XUfØVYf'\ ]bUi g'Ui g[ Y'Ògh' '@\_U'Y  
F UXZU\fyfj Yfy]b][ i b[ Yb'i bX'G]W Yf\Y]hgcf[ Ub]gUh]cbYb'\ UVYb  
g]W'ni 'K cfh[ Ya Y'XYhž'i a 'Ui ZX]Y'Bchk YbX][ \_Y]h'j cb'Yf\ Ò\ hYb  
G]W Yf\Y]hga U» bU\ a Yb'\ ]bni k Y]gYb''=a ' < ]bV`]W'Ui Z'\_ØbZh][ Y  
; YZU\fyb'ZcfXYfb'g]Y'b]W h'bi f'a Y\ f'Dc`nY]dfÅgYbnž'gcbXYfb  
Ui W'X]Y' =a d'Ya Ybh]Yfi b[ 'j cb'gdYn]Y`Yb'G]W Yf\Y]hgUb`U[ Yb'k ]Y  
, VYfk UW i b[ g\_Ua YfUg'Ub' [ YZ\fxYhYb'GhY`Yb"

Ni gÀhn`WŁ`gWŁ`U[ Yb`j YfgWŁ]YXYbY`ϕhYfYggYb[ fi ddYb  
A U» bU\ a Yb`k ]Y`fY[ Y`a À» ][ Y`?cbhfc`Yb`i bX`X]Y`J YfVYggYfi b[  
XYf`6Y`Yi WŁhi b[ `Ub`F UXk Y[ Yb`j cf`"² ZZYbh`WŁ\_Y]hgUfVY]h`ni f  
GYbg]V`]g]Yfi b[ `ZØf`X]Y`F]g]\_Yb`j cb`J UbXU`]ga i g]a  
GhfU» Ybj Yf\_Y\ f`\_ÖbbhY`YVYbZU`g`XUni `VY]hfU[ Ybž`XUg  
6Yk i gghgY]b`ni `gWŁ`ÅfZYb`i bX`dchYbn]Y`Y`HÀhYf`UVni gWŁ`fYW\_Yb"  
8Yf`8]U`c[ `nk ]gWŁ`Yb`F UXZU`fYfbž; Ya Y]bXYj YfhfYhYfb`i bX`XYf  
Dc`]nY`]gh`YbhgWŁ`Y]XYbXž`i a `Y]bY`g]WŁ`YfY`ϕZfUghfi \_hi f`ZØf`U`Y  
J Yf\_Y\ fghY]`bY\ a Yf`ni `gWŁ`UZZYb"

8YhU]`g

6Ygi WŁ`Yb`G]Y`i bg`Ui Z.`b!U[ "XY