

5 fVY]h[ YVYf`XØfZYb`df]j UhY`@Ud hcdg`b]W h  
j Yf`Ub[ Yb.`F YW h g`U[ Y`]a` , VYfV`]W\_

8 UfZ`XYf`5fVY]h[ YVYf`df]j UhY`@Ud hcdg`ZØf`X]Y`5fVY]h  
j Yf`Ub[ Yb`3`9fZU`fYb`G]Yž`k Ufi`a`X]Y`6YfY]hghY``i b[ `j`cb  
5fVY]hga`]hY`b`DZ]W h]gh`i bX`k Y`W`Y`C dh]cbYb`Yg`[ `]Vh`



⊕`XYf`\Yi h[ ]Yb`X][ ]hU`Yb`K`Y`hg]bX`j`]Y`Y`5b[ YghY``hY`c`Zi`a` ]h`XYf`  
: fU[ Y`\_cbZfcbh]Yfh`A`i`gg`]W`ZØf`a`Y`]bYb`æV`a`Y`]b`Y][ YbYg`; Yf`Åh`  
bi`hYb`3`GY`]Yg`XYf`@Ud hcd`cXYf`XUg`Ga`Ufhd`\cbYž`bYVYb`XYa`  
X]Ybgh]W`Yb`9ei`]da`Ybh`j`YfZØ[ Yb`j`]Y`Y`ØVYf`dYfgØb`]W`Y`; Yf`ÅhY`  
5VYf`k`]Y`g]Y`h`Yg`a`]h`XYa`f`YW`h]W`Yb`F`U`a`Yb`Ui`gž`k`Ybb`  
5fVY]h[ YVYf`\_Y]bY`5fVY]hga`]hY``VYfY]hghY``Yb`3`

8]Y`\_`UfY`5bhk`cfh`]b`8Yi`hgW`UbX``Ui`hYh`5fVY]h[ YVYf`XØfZYb`  
X]YgYb`5bgdfi`W`b]W`h`ghY``Yb`"DYhYf`A`YmYfž`Y]b`: UW`Ub`k`U`h`ZØf`  
5fVY]hgfYW`hž`Yf`\_`Åfhž`XUgg`Yg`X]Y`DZ]W`h`XYg`5fVY]h[ YVYfg`]ghž`X]Y`  
bc`hk`YbX][ Yb`; Yf`ÅhY`VYfY]hni`ghY``Ybž`i`a`X`Yb`A`]hUfVY]hYb`X]Y`  
9fZØ``i`b[ `]\`fYf`5i`Z[ UVYb`ni`Yfa`Ø[ `]W`Yb`"8]Yg`\Uh`6YXYi`hi`b[ ž`  
b]W`h`bi`f`Ui`Z`fYW`h]W`Yf`9VYbYž`gcbXYfb`Ui`W`ZØf`XUg`

K c\`VYZ]bXYb`XYf'6YgWÅZh[ hYb`i bX`X]Y`9ZZ]n]Ybn`XYf'5fVY]h`

K Ug`VYXYi hYh` 6f]b[ `Mci f`Ck b`8Yj ]W` 3`

8 Ug`H\Ya U` 6f]b[ `Mci f`Ck b`8Yj ]W` `fbMC8Łž`ni`8Yi hgW` 6f]b[ XY]b`Y][ YbYg` ; YfÅh`a ]h ž[ Yk ]bbh`ni bY\`a YbX`Ub`6YXYi hi b[ " <]YfVY]\`UVYb`5b[ YghY``hY`X]Y` : fY]\`Y]hž`Y][ YbY` ; YfÅhY`ZØf VYfi Z]W`Y`Nk YW`\_Y`Y]bni gYhnYbž`U``YfX]b[ g[ YgW` ]Y\`h`X]Yg Ui ggW` ]Y»` ]W`\_Ui Z`ZFY]k ]`][ Yf'6Ug]g"K Ybb`Y`a UbX`g]W` YbhgW`Y]XYhž`gY]b`df]j UhYg` ; YfÅh`ZØf`X]Y`5fVY]h`ni`bi hnYbž`gc``hY Yf`g]W`\_ØVYf`Y]b][ Y`k ]W`h][ Y`Di b`\_hY`VYk i ggh`gY]b"

A YmYf`k Y]gh`XUfUi Z`\]bž`XUgg`5fVY]h[ YVYf`]b`gc`W`Yb` : Å``Yb`X]Y 5Vbi hni b[ `i bX`ni gÅh`]W`Y`?cghYbž`X]Y`Xi fW`\_X]Y`Bi hni b[ df]j UhYf` ; YfÅhY`YbhghY\`Ybž`VYfØW`\_g]W`h][ Yb`a ØggYb"8]Yg`\_Ubb Xi fW`\_Y]bY`5i Zk UbXgYbhgW`ÅX][ i b[ `]b` : cfa`\_j`cb DUi gW`U`VYhfÅ[ Yb`[ YgW`Y\`Yb`"Gc`V`Y]Vh`XUg`Bi hni b[ `XYf Y][ YbYb` ; YfÅhY`b]W`h`bi f`U`g`VYei Ya Y`C`dh]cbž`gcbXYfb`k ]fX Ui W`\_ZU]f`i bX`hfUb`gdUfYbh`VY\`UbXY`h"8cW`\_XUg`]gh`b]W`h`X]Y Y]bn][ Y`<YfUi gZcfXYfi b[ ž`X]Y`X]Y`Bi hni b[ `df]j UhYf` ; YfÅhY`a ]h g]W`\_Vf]b[ h`

9]b`nYbhfU`Yf`5gdY`\_h]g]bX`G]W`Yf\`Y]hg!`i bX`8UhYbgW`i hnVY`Ub[ Y" 8]Y`J`Yfk YbXi b[ `df]j UhYf`Ga Ufhd`\`cbYg`cXYf`@Udhcdg`\_Ubb dchYbn]Y``Y`F ]g]\_Yb`ZØf`X]Y`i bhYfbY\`a YbgXUhYb`XUfghY``Yb"K Ybb gYbg]V`Y`\_bZcfa`Uh]cbYb`Ui Z`Y]bYa`df]j UhYb` ; YfÅh`[ YgdY]W`Yfh k YfXYbž`ØZbYh`XUg`HØf`i bX`Hcf`ZØf`a`Ò[ `]W`Y`8UhYb`YW`\_g`cXYf i bVYZ[ [ hYb`Ni [ f]ZZ`8U\`Yf`]gh`Yg`i bi a [ Åb[ `]W`ž`XUgg`gck c\` 5b[ YghY``hY`U`g`Ui W`\_5fVY]h[ YVYf`\_`UfY`F ]W`h`b]Yb`Ui ZghY``Ybž`i a X]YgY`F ]g]\_Yb`ni`a`]b]a`]YfYb"

8]Y`dYfg`Òb`]W`Y`Bi hni b[ `]a`6Yfi Z`Vf]b[ h`b]W`h`bi f`fYW`h`]W`Y : fU[ Yb`Ui Zž`gcbXYfb`j YfXYi h`]W`h`Ui W`\_X]Y`9btk ]W`\_i b[ `XYf 5fVY]hgk Y`h`A ]h`XYf`Zc`fhgW`fY]hYbXYb`8][ ]hU`]g]Yfi b[ `i bX`XYa ZYI ]V`Yb`5fVY]hYbž`ghY``h`g]W`\_X]Y` : fU[ Yž`cV`hfUX]h]cbY`` VYfY]h[ YghY``hY`5fVY]hg[ YfÅhY`bcW`\_nY]h[ Ya`Å`g]bX`cXYf`cV`Yg bYi Y`A`cXY``Y`VfUi W`\_hž`X]Y`a`Y\`f` : fY]\`Y]h`i bX` : `YI ]V`]hÅh`XYb 5b[ YghY``hYb`V]YhYb"

K ]W\ h][ Y', VYf`Y[ i b[ Yb`ZØf`6YgW\ ÀZh][ hY

: Øf`5fVY]hbY\ a Yf`gh`Yg`fUhgUa ž`g]W\ j cf`XYf`Bi hni b[ `]\fYf  
Y][ YbYb'; YfÀhY`ja`æV`[ i hni `]bZcfa ]YfYb"K Yf`gY]bY`df]j UhYb  
; YfÀhY`]b`XYb`8]Ybgh`ghY`hž`gc`hY`g]W\ j Yf[ Yk ]ggYfbž`XUgg`XYf  
5fVY]h[ YVYf`Ui W\`VYfY]h`]ghž`X]Y`UbZU`YbXYb`?cghYb`ni`XYW`Yb"  
5Vbi hni b[ ž`Ghfca j YfVfUi W\`cXYf`UbXYfY`5i g[ UVYb`\_ØbbYb  
gW\ bY`ni gUa a Yb`ca a Yb`i bX`gc`hYb`XU\Yf`]b`X]Y  
, VYf`Y[ i b[ Yb`a ]h`Y]bZ]Y»Yb"Ni XYa`Ya`dZ]Y\`h`A YmYfž  
g]W\ Yfni ghY`Ybž`XUgg`G]W\ Yf\Y]hgj cf`Y\fi b[ Yb`[ YhfcZYb`k YfXYbž  
i a`X]Y`J YfhfUi`]W\`\_Y]h`XYf`8 UhYb`ni`k U\Yb"

⇒ XYf`\Yi h][ Yb`NY]h`\_ØbbhYb`i bhYfbY\ a Yb`Xi fW\Ui gj cb`Y]bYf  
\_`UfYb`GhfUHY[ ]Y]a`l a [ Ub[ `a ]h`6MC8`dfcZ]h]YfYb"8i fW\  
[ YY][ bYhY`F U\ a YbVYX]b[ i b[ Yb`i bX`hfUbgdUfYbhY  
J YfY]bVUfi b[ Yb`\_ØbbYb`VY]XY`GY]hYbž`5fVY]h[ YVYf`k ]Y  
5fVY]hbY\ a Yfž`dfcZ]h]YfYb`i bX`X]Y`J cfhY]Y`XYf`Bi hni b[ `df]j UhYf  
; YfÀhY`cdh]a U`Ui ggW\ ØdZYb"

Ni gUa a Yb[ YZUggh]gh`X]Y`YXY`ghY`5i Z[ UVY`XYf`5fVY]h[ YVYfž`ZØf  
]\fY`A ]hUfVY]hYf`Y]b`g]W\ YfYg`i bX`dfcXi`\_h]j Yg`5fVY]hgi a ZY`X`ni  
gW\ UZZYb"8 Ug`gW\`Y»h`Ui W\`XYb`j YfUbhk cfhi b[ gj c`Yb`l a [ Ub[  
a ]h`dYfgØb`]W\ Yb'; YfÀhYb`a ]h`Y]b"»XcW\`V`Y]Vh`X]Y  
[ fi bX`Y[ YbXY`J YfUbhk cfhi b[ `VY]a`5fVY]h[ YVYfž`[ YY][ bYhY  
5fVY]hga ]hhY`VYfY]hni ghY`Yb"

F YW\ h`]W\ Y'; fi bX`U[ Yb`i bX`DZ`]W\ hYb`XYf  
5fVY]h[ YVYf

8]Y`fYW\ h`]W\ Yb'; fi bX`U[ Yb`ZØf`X]Y`6YfY]hghY`i b[ `j cb  
5fVY]hga ]hhY`b`Z]bXYb`g]W\ `]b`j YfgW\ ]YXYbYb'; YgYhnYbž`i bhYf  
UbXYfYa`ja`5fVY]hgfYW\ h`i bX`ja`6Yhf]YVgj YfZUggi b[ g[ YgYhn"8Yf  
5fVY]h[ YVYf`]gh`bUW\`z', \$`5Vg"%GUhn`&`6YhfJ; `j YfdZ]W\ hYhž`X]Y  
bch`k YbX][ Yb`A ]hhY`ZØf`X]Y`5fVY]hni f`J YfZØ[ i b[ `ni`ghY`Yb"8]YgY  
J YfdZ]W\ hi b[ `[ Y\h`< UbX`]b`< UbX`a ]h`XYf: Øfgcf[ YdZ]W\ h`XYg  
5fVY]h[ YVYfgž`X]Y`XUfUi`ZUVn]Y`hž`X]Y`G]W\ Yf\Y]h`i bX`; Ygi bX\Y]h  
XYf`A ]hUfVY]hYbXYb`ni`[ Yk`À`f`Y]ghYb"

æa 'FU\ a Yb'X]YgYf': Øfgcf[ YdZ]W\h'a ØggYb'5fVY]h[ YVYf'Ui W  
XUZØf'gcf[ Ybž'XUgg'X]Y'5fVY]hga ]hhY''XYb' [ Y'hYbXYb  
G]W\Yf\Y]hgghUbXUfXg'Yb hgd'fYW\Yb''8 Ug'VYhf]Zhi'bgVYgcbXYfY  
hYW\ b]gW\Y'; YfÅhYž'XYfYb'i bgUW\ [ Ya Å» Y'J Yfk YbXi b[ 'ni  
I bZÅ''Yb'cXYf'8UhYbj Yf'i gh'ZØ\ fYb' \_ÖbbhY''Ni XYa 'j Yf'Ub[ Yb  
8UhYbgW\i hn[ YgYhYž'XUgg'dYfgÖb'W\Y'8UhYb'XYf'A ]hUfVY]hYbXYb  
[ YgW\Øhnh'k YfXYbž'k Ug'X]Y'Bi hni b[ 'df]j UhYf'; YfÅhY'ni gÅhni'W\  
\_ca d`n]Yfh'a UW\Yb' \_Ubb"

## J c fhY]'Y' i bX' < YfUi gZc fXYfi b [ Yb'XYg'6MC8! 5bgUhnYg

8Ug'~6f]b[ 'Mci f'ck b'8Yj ]W''!A cXY''Vf]b[ higck c\''J c fhY]'Y'U'g  
Ui W' < YfUi gZc fXYfi b [ Yb'a ]hg]W''5i ZXYf'Y]bYb'GY]hY'dfcZ]h]YfYb  
I bhYfbY\ a Yb'j cb'\Ö\YfYb'A ]hUfVY]hYfa ch]j Uh]cb'i bX  
DfcXi \_hj ]hÅhž'XU'5b[ YghY''hY'; YfÅhY'bi hYbž'a ]h'XYbYb'g]Y  
j YfhfUi hg]bX''Ni XYa ' \_ÖbbYb'I bhYfbY\ a Yb'cZi?cghYb'ZØf'X]Y  
5bgW\UZI b[ 'i bX'K Ufhi b[ 'j cb'; YfÅhYb'gdUfYb"

5i ZXYf'UbXYfYb'GY]hY'VYghY\Yb'YXcW\Ui W'F]g]\_Yb''9]b  
Yf\Ö\hYg'G]W\Yf\Y]hgf]g]\_c' ]gh'Y]bYg'XYf' [ fÖ» hYb'DfcV'Ya Yž'XU  
dYfgÖb'W\Y'; YfÅhY'a Ö[ ' ]W\Yfk Y]gY'b]W\h'a ]h'XYb' [ 'Y]W\Yb  
G]W\Yf\Y]hgghUbXUfXg'Ui g[ YghUhhY'h]g]bX'k ]Y'X]Y'XYg  
I bhYfbY\ a Ybg''8Ug' \_Ubb'ni '8UhYb'YW\_g'cXYf'7mVYfUb[ f]ZZYb  
ZØ\ fYb''5i W'X]Y'fYW\h'W\Yb'FU\ a YbVYX]b[ i b[ Yb'g]bX'cZh  
i b\_ 'Ufž'k Ug'ni '?cbZ]\_hYb'nk ]gW\Yb'5fVY]hbY\ a Yfb'i bX  
5fVY]h[ YVYfb'ZØ\ fYb' \_Ubb"

## 5\_hi Y''Y' GhUh]gh]\_Yb'ni f'Bi hni b [ 'j cb'6MC8

@Ui h'Y]bYf'Ghi X]Y'j cb'; UfhbYf'bi hYb'VYfY]hg'ØVYf'+\$i 'XYf  
I bhYfbY\ a Yb'XUg'6MC8!Df]bn]d' ]b' ]f[ YbXY]bYf': cfa ''9]bY  
k Y]hYfY'I a ZfU[ Y'j cb'Dk 7'nY][ hž'XUgg'ZUgh') \$i 'XYf  
A ]hUfVY]hYbXYb' ]\fY'Y][ YbYb'; YfÅhY'ZØf'X]Y'5fVY]h'j Yfk YbXYbž  
gY'Vgh'k Ybb'XUg'I bhYfbY\ a Yb'\_Y]bY'cZZ]n]Y''Y'6MC8!Dc`h]\_ '\Uh'  
8]YgY'NU\Yb'j YfXYi h]W\Yb'XYb'HfYbXž'XYb'X]YgYf'5bgUhn'i bhYf  
XYb'a cXYfbYb'5fVY]hbY\ a YbXYb'Y]bb]a a hž'i bX'VYhcbYb'X]Y

BchK YbX][ \_Y]hj cb' \_UfYb'F ]W\h]b]Yb'i bX  
G]W\Yf\Y]hga U» bU\ a Yb"

I bhYfbY\ a Ybž'X]Y'6MC8'Y]bgYhnYbž'gY\Yb'g]W\` \Äi Z][ 'a ]h': fU[ Yb  
ni 'XYb', VYfhfU[ i b[ g! 'i bX'F ØW\_YfghUhi b[ gf]W\h]b]Yb  
\_cbZfcbh]Yfh''9]bY' \_UfY'8YZ]b]h]cb'gc`W\Yf'5gdY\_hY'gck ]Y  
fY[ Y'a Ä» ][ Y'GW\i 'i b[ Yb'ZØf'A ]hUfVY]hYbXY' \_ÖbbYb'XUni  
VY]hfU[ Ybž'X]Y'F ]g]\_Yb'ni 'a ]b]a ]YfYb'i bX'[ `Y]W\ nY]h][ 'X]Y'J cfhY]'Y  
X]YgYg'5bgUmYg'ni 'a UI ]a ]YfYb"

## GW\ `i ggZc `[ Yfi b[

8]Y'8]g\_i gg]cb'i a 'X]Y'Bi hni b[ 'df]j UhYf'; YfÄhY'ZØf'X]Ybgh]W\Y  
Nk YW\_Y'k ]fX'k Y]hYf\ ]b' ]a 'A ]hY'`di b\_h'XYf'UfVY]hgfYW\h]W\Yb  
8YVUhY'ghY\Yb''5fVY]h[ YVYf'g]bX'j YfdZ]W\hYhž'X]Y'5fVY]hga ]hhY`  
VYfY]hni ghY`Ybž'k Ä\ fYbX'[ `Y]W\ nY]h][ 'X]Y'J cfhY]'Y'i bX'F ]g]\_Yb  
XYg'6MC8!5bgUmYg'gcf[ ZÄ'h][ 'UV[ Yk c[ Yb'k YfXYb'a ØggYb''9]bY  
hfUbgdUfYb'hY'?ca a i b]\_Uh]cb'i bX' \_UfY'F ]W\h]b]Yb' \_ÖbbYb'XUni  
VY]hfU[ Ybž'X]Y'Ni gUa a YbUfVY]h'i bX'XUg'J YfhfUi Yb'nk ]gW\Yb  
5fVY]h[ YVYfb'i bX'A ]hUfVY]hYbXYb'ni 'ghÄf\_Yb"

· · B 5;

8YhU]`g

6Ygi W\Yb'G]Y'i bg'Ui Z.'a Y]b!VYf`]b"bYh