

HfUX]h]cb`hf]ZZh`K UbXY`. `DZÄ`n]gWXY  
K Y]b\_Öb][ ]b`k ]fX`ni f`K Y]bVc hgwX UZhYf]b

7\ f]gh]bY`GWXbY]XYf`ZcfXYfh`Y]bY`BYi VYk Yfhi b[ `XYf  
K Y]bk YfVi b[ `]b`XYf`DZU`n`bUWX`XYf`9bhgWXY]Xi b[ ž`X]Y  
K Y]b\_Öb][ ]b`UVni gWXYZZYb"

8]Y`9bhgWXY]Xi b[ `]cb`DZU`nk Y]bž`X]Y`Dcg]h]cb`XYf`DZÄ`n]gWXYb  
K Y]b\_Öb][ ]b`UVni gWXYZZYb`i bX`ghUhhXYggYb`Y]bY  
DZU`nK Y]b6chgWXYUZhYf]b `]bg`@VYb`ni `fi ZYbž`\Uh]b`XYf`FY[ ]cb  
ZÖf`[ Ya ]gWXYh`FYU\_h]cbYb`[ Ygcf[ h`7\ f]gh]bY`GWXbY]XYfž  
Y\Ya U`][ Y`K Y]b\_Öb][ ]b`i bX`U`hi Y`Yg`A ]h[ `]YX`XYg`9i fcdÄ]gWXYb  
DUf`Ua Ybhg`ZÖf`X]Y`78I ž`Äi »Yfh`6YXYb\_Yb`ØVYf`X]YgYb`GWXf]hh  
i bX`ZcfXYfh`Y]bY`i a ZUggYbXY`8]g\_i gg]cb`ØVYf`X]Y`Fc`Y`XYf  
K Y]bk YfVi b[ `]b`XYf`DZU`n"

9]b`6`]W\_`Ui Z`X]Y`HfUX]h]cb

GWXbY]XYfž`X]Y]b`9XYb\_cVYb`YVhi bX`g]WXY]b`]\fYf`dc`h]gWXYb  
5fVY]hj cf`U`Ya`a ]h`@UbXk ]fhgWXYUZh`i bX`K Y]bVUi `VYgWXYÄZh][ hž  
g]Y\h`X]Y`9bhgWXY]Xi b[ `U`g`i bni fY]WXYbX`Xi fWXYUWXh`Ub`"8Yf  
GWXf]hž`X]Y`Ub[ Y`HfUX]h]cb`XYf`K Y]b\_Öb][ ]b`Xi fWXY]bY  
6chgWXYUZhYf]b`ni `YfgYhnYbž`k ]fX`]b`XYf`² ZYbh]WXY`Y]h`\_cbhfcj Yfg  
X]g\_i h]Yfh`" 8]Y`U`hi Y`Y`8]g\_i gg]cb`nY][ hž`XUgg`k YgYbh]WXY`h]YZYfY  
, VYf`Y[ i b[ Yb`j cbb`ÖhYb`g]bX` ž`gc`GWXbY]XYf`" Æf`? f]h]\_di b`h`]ghž  
XUgg`X]Y`J YfUbhk cfh]WXYb`j cb`DZU`nk Y]b`a`Ö[ `]WXYfk Y]gY`X]Y  
6YXYi hi b[ `i bX`X]Y`5i gk ]f\_i b[ Yb`X]YgYf`9bhgWXY]Xi b[ `b]WXYh  
j c`gh`ÄbX][ `YfZUggh`\UVYb"

8Yf`[ YgY`gWXYUZh`]WXY`9]bZ`i gg`XYf  
9bhgWXY]Xi b[

8]Y': fU[ Yžk ]Y'g]Wł'gc`WłY'J YfÅbXYfi b[ Yb'Ui Z'X]Y'K Y]bfY[ ]cb  
i bX']\fY'\_i`hi fY`Yb'K i fnY`b'Ui gk ]f\_Ybž]ghj cb'6YXYi hi b[ "  
K Y]b\_Òb][ ]bbYb'\UhhYb'\]ghcf]gWł' [ YgY\Yb'Y]bY'k ]Włh][ Y'F c`Y']b  
XYf'F YdfÅgYbhUh]cb`XYf'K Y]bVUi \_i`hi f'i bX'XYf'Gh]a a Yb'XYf  
DfcXi nYbhYb"GWłbY]XYf'\YVh\Yfj c fž'XUgg'Yg'b]Włh'\_c fFY\_h'gY]ž  
hfUX]h]cbY`Y'K YfhY'U'g'j YfU'hYhini`VYhfUWłhYbž'k Å\fybX'a Ub  
[ `Y]WłnY]h][ `a cXYfbY'5bgÅhnY'UbghfYVh"G]Y'd`ÅX]Yfh'XUZØfž'XUgg  
VY]XY'GY]hYb'`HfUX]h]cb'i bX'`b bcj Uh]cb'`VYfØW\_g]Włh][ h'k YfXYb  
gc`hYb"

## 8]Y' B c hk Y b X][ \_Y]h'Y]bYf'dfcZYgg]c b Y`Y b 5 b U`mgY

8 Ug'k UWłgYbXY'`b hYfYggY'Ub'K Y]bž']bgVYgcbXYfY']b`XYf'DZU`nž  
a UWłh'X]Y'8]g\_i gg]cb'i a`K YfVi b[ `i bX'F YdfÅgYbhUh]cb  
VYgcbXYfg'fY'Yj Ubh"GWłbY]XYf'gWł'À[ hij c fž'XUgg'Y]bY']b!XYdh\  
5 b U`mgY'j c fVYfY]hYh'k YfXYb'gc`hYž'i a`YfUi gni ]bXYbž'k Ug'Y]bY  
YfZc`[ fY]WłY'i bX'dfcZYgg]c b Y`Y'DfÅgYbhUh]cb`ZØf'Y]bY  
6 chgWłUZhYf]b'ja`K Y]bVYfY]Wł'k ]f\_]Wł'VYXYi hYh"G]Y'VYhcbhž'XUgg  
Yg'k ]Włh][ `gY]ž'X]Y'GhÅf\_Yb'XYf'HfUX]h]cb'ni`j YfghY\Ybž'k Å\fybX  
a Ub'[ `Y]WłnY]h][ `X]Y'< YfUi gZc fXYfi b[ Yb'XYf'a cXYfbYb  
K Y]bk YfVi b[ `Ub[ Y\h"

## 9]b`b UWł \ U`h][ Y f'8 ]U`c [

8]Y'8 YVUhhY'ØVYf'X]Y'Ni \_i bZi'XYf'K Y]bk YfVi b[ `]b`XYf'DZU`n nY][ h  
Y]b'6YXØfZb]g'b UWł'Y]bYa`i a ZUggYbXYb'8]U`c[ `nk ]gWłYb  
K Y]bVUi Yfb'i bX'9bhgWłY]Xi b[ gc f[ UbYb"GWłbY]XYf'Zc fXYfh'Y]bY  
D`UhhZcfa ž'Ui Z'XYf'X]Y'Gh]a a Yb'XYf'K Y]bdfcXi nYbhYb'i bX'XYf  
K Y]b`]YV\UVYf'[ Y\Øfh'k YfXYb"8]YgY'; YgdfÅWłYž'gc'[ `Ui Vh'g]Yž  
\_ÒbbhYb'XUni`VY]hfU[ YbžY]bYb'? ca dfca ]gg'ni`Z]bXYbž'XYf  
gck c`\`X]Y'HfUX]h]cb'fYgdY\_h]Yfh'U'g'Ui Wł'F Ui a`ZØf'`b bcj Uh]cb  
`Åggh"

## 9]b`5 i Zfi Z'ni f`i b hYfghØhni b[ `XYf K Y]bWł a a i b]hm

⇒Y]bYf'NY]hž]b'XYf'c\_U'Y'K Y]b[ ØhYf'i bX'X]Y'K Y]bdfcXi \_h]cb'j cf  
j ]Y'ZÀ'h][ Yb'<YfUi gZcfXYfi b[ Yb'ghY\Ybž]gh'Yg'YbHgWY]XYbXž'XUgg  
X]Y'7ca a i b]hmini gUa a YbUfVY]hYh'i bX'g]W'Ui Z'Y]bY  
[ Ya Y]bgUa Y'J ]g]cb'Y]b][ h" Bi f'[ Ya Y]bgUa 'ÖbbYb'k ]f'X]Y  
DZÀ'nYf'K Y]bFY[ ]cb'ghUf\_'i bX'fY'Yj Ubh'\U'hYb ž'gW'Y»h  
GWbY]XYf" ⇒fY'6Ya Ø\i b[ Ybž'X]Y'J YfV]bXi b[ 'nk ]gWYb  
J Yf[ Ub[ Yb\Y]h'i bX'Ni \_i bZ'hini 'ghÀf\_Ybž'nY][ Ybž'XUgg'X]Y  
8]g\_i gg]cb'ØVYf'K Y]bk YfVi b[ 'b]W'h'bi f'i a 'Y]bY'Dcg]h]cb'[ Y\hž  
gcbXYfb'i a 'X]Y'[ YgUa hY'⇒Yb]h]h'X'Yf'DZÀ'nYf'K Y]bVUi \_i 'hi f"

## 6`]W\_`]b`X]Y`Ni`\_i`bZh

: Øf'U''Y'K Y]b`]YV\UVYf']b'XYf'FY[ ]cb'[ ]Vh'Yg'nU'\fY]WY  
⇒h]Uh]j Ybž'X]Y'XUg'; YgdfÅW'Ua '@Ui ZYb'\U'hYb"J YfUbghU'hi b[ Ybž  
DcXWUghg'i bX'BYk g'YhYf'V]YhYb']bZcfa Uh]j Y'9]bV`]W\_Y`]b`X]Y  
K Y]bk Y'h'i bX'\Y`ZYbž'XUg'6Yk i gghgY]b'ZØf'X]Y`\_i`hi fY''Y  
6YXYi hi b[ 'XYg'K Y]bg]b'XYf'DZU'n'ni 'gW'ÀfZYb"8]Y  
<YfUi gZcfXYfi b[ Ybž'j cf'XYbYb'XYf'K Y]bVUi 'ghY\hž'V]YhYb  
ni [ 'Y]W'7\UbW'b'ZØf'Y]bYb'Zfi W'hVUfYb'8]U`c[ 'i bX'X]Y  
K Y]hYfYbhk ]W\_`i b[ 'XYf'K Y]bk YfVi b[ "

· · B 5;

8YhU]`g

6Ygi WYb'G]Y'i bg'Ui Z.'X]Y!bUW f]W hYb"bYh