

A ]h'GdUbbi b [ ' ]bg' < Ua a Yf'8YfVm 'Hi G  
; Yfa Ub]U'hf]ZZh'Ui Z'G; '6cW\_i a !< Òj Y`

?fY]gdc\_U'!8YfVm]b'<Ua a . 'Hi G; Yfa Ub]U'@c\Ui gYf\c`n  
hf]Zzh'Ui Z'G; '6cW\_i a !< Òj Y`"9]b'gdUbbYbXYf  
DZ]W\hgd]Y`Ui ZhU\_h'Ua 'GcbbhU[ `

5a 'GcbbhU[ 'ghY\h'XUg'YfghY'DZ]W\hgd]Y`XYf'bYi Yb'GU]gcb'Ubž'Y]b  
8YfVm]a '?fY]gdc\_U`nk ]gW\Yb'XYa 'Hi G; Yfa Ub]U'@c\Ui gYf\c`n  
i bX'XYf'G; '6cW\_i a !< Òj Y`" ð'X]YgYa 'Ni gUa a YbhfYZZYb'k ]fX  
XYi h]W\ž'k ]Y'g]W\XYf': i » VU``b]W\h'bi f'gdcfh]W\ž'gcbXYfb'Ui W  
[ YgY`gW\UZh]W\ ]a '?fY]g'<Ua a 'Ui gk ]f\_h"

GhÒfi b [ Yb ' ]b 'XYf' J c fVYfY ]hi b [

; YfUXY ]b'XYf'J c fVYfY ]hi b [ gd\UgY`Ui Z'X]Y`bYi Y`@[ U`\_Ubb'XYf  
ZfØ\Y`Dc\_U'hYfa ]b'ZØf'X]Y`HfU]bYf'\YfUi gZcfXYfbX'gY]b" :>Ub  
A UbW\ž'XYf'bYi Y`HfU]bYf'XYf'G; '6cW\_i a !< Òj Y`ž'Ài » Yfh  
6YXYb\_Yb.' 8Yf'HYfa ]b'WfUg\h'bUhØf]W\gW\cb'Y]b'V]ggW\Yb'X]Y  
J c fVYfY ]hi b [ " '8 Ug'HYUa ž'XUg]b'XYf'K YghZU`Yb`][ U'gd]Y`hž'k c`hY  
g]W\c'dh]a U`Ui ZXYb'@[ UUi ZhU\_h'Ua ' " # " '5i [ i ghj c fVYfY ]hYbž  
XcW\bi b'ghY\h'XUg'8YfVm'Ub" A UbW\ ]gh'g]W\VYk i gghž'XUgg'X]Y  
G]hi Uh]cb'b]W\h]XYU` ]ghž'VYgcbXYfg'XU'XUg'HYUa 'j ]Y`Y`bYi Y  
Gd]Y`Yf' ]bhY [ f]Yfh"

HYghgd]Y`j c f'XYa '[ fc » Yb

5i ZY]b Ub XYfhfY ZZY b

I ba ]hhY`VUf'j c f'XYa '8YfVm'ia i gg'X]Y`G; 'bcW\Y]b'HYghgd]Y`  
[ Y [ Yb'6UX'K YghYfb\_c'hYb'VYghfY ]hYb" '8Yf'HfU]bYf'Xc'fh]gh'Y]b  
[ i hYf'6Y\_UbbhYf'j cb'a ]f ž'gc'A UbW\ž'XYf'X]Y'6Y [ Y [ bi b [ 'hfc'm  
Y]bYf'Ub [ YgdUbbhYb'dYfgcbY`Yb'@U [ Y`U`g'k ]W\h] [ 'YfUW\hYh"

NU\`fY]WXY`Gd]Y`Yf`k ]Y`A U]\_`F ]Yd]b[ ž`A UfWK c\`fUh`i bX  
A c\Ua a YX`9``; ci fUf]`ZU``Yb`Ui gž`k cXi fW`X]Y`A UbbgWUZhghUf\_  
XYn]a ]Yfh`k ]fX`` 8]Y`\_ca d`YhhY`GYW`g`k ]fX`a ]f`ZY`\`Yb ž`Yf\_`Àfh  
A UbW`k Y]hYf``8 Ug`HYghgd]Y``X]Ybh`b]W`h`bi f`XYf`Gd]Y`dfUI ]gž  
gcbXYfb`Ui W`XUni ž`X]Y`HYUa W`Ya ]Y`ni `Ybhk ]W\_Y`b"

## 8 Yf`C dh]a ]ga i g`j cb`@c\Ui gYf`c`n

⇒a `; Y[ YbgUhn`XUni `g]Y\`h`A UfWc`@]YXh\_Yž`HfU]bYf`j cb`Hi G  
; Yfa Ub]U`@c\Ui gYf`c`nž`XYb`ZfØ\`Yb`Dc\_U`hYfa ]b`U`g`7\UbW`"  
A ]f`\_ca a h`XYf`HYfa ]b`Xi fW`Ui g`[ Y`Y[ Ybž`k Y]`Yg`Y]b`[ i hYf  
; Y[ bYf`]gh`K ]f`\_ØbbYb`bi f`ØVYffUgW`Yb ž`gU[ h`Yf`cdh]a ]gh]gW`"  
8 Yf`Hi G`VYZ]bXYh`g]W`bcW`]b`XYf`9]b[ Yk Ø\`bi b[ gd\UgYž`k Ug`X]  
W`Ya ]gW`Y`5Vgh]a a i b[ `]bbYf\U`V`XYg`HYUa g`Ub[ Y\`h`` ⇒W`gY\Y  
Yg`U`g`HYghgd]Y``Ub ž`ZØ\`fh`@]YXh\_Y`Zcfhž` XUbUW`g]Y\`h`a Ub`UVYfž  
k c`k Yf`ghY\`h]b`XYf`A UbbgWUZh`i bX`k c`k ]f`U`g`; UbnYg`ghY\`Yb"

## Gdcfh`]WXY`< YfUi gZcfXYfi b[ Yb`i bX

### 9fk Ufhi b[ Yb

CVk c\`XYf`Hi G`; Yfa Ub]U`ØVYf`Y]bYb`? UXYf`j cb`&`Gd]Y`Yfb  
j YfZØ[ hž`\_Àa dZYb`Y]b][ Y`HYUa a ]h[ `]YXYf`a ]h]Yf`Yhni b[ Yb`cXYf  
g]bX`]a `i f`Ui V``8]Yg`\]bhYf`Àggh`Y]bY`@ØW\_Y`]a `5i Z[ YVchž`XcW  
X]Y`Gd]Y`Yf`g]bX`a ch]j ]Yfhž`]f`6YghYg`ni `[ YVYb``@]YXh\_Y`k ]``X]Y  
; Y`Y[ Yb\`Y]h`bi hmYbž`i a `ni `gY\`Ybž`k ]Y`g]W`X]Y`A UbbgWUZh`]a  
J Yf[ `Y]W`ni a `Ø\`Yf`\_Ugg][ Yb`; Y[ bYf`gW`U[ Yb`\_Ubb`` K ]f  
ZFYi Yb`i bg`Ui ZXUg`Gd]Y``[ Y[ Yb`XYb`nk Y]hX]W`ghYb`]; gW`Ui g  
XYa `HY]W`bUW`F`mbYfb ž`gW`\]Y» h`Yf`gY]bYb`; YXUb\_Yb`UV"

8 Ug`? fY]gdc\_U`!8 YfVmi]gh`b]W`h`bi f`Y]b`gdcfh]W`Yg`8i Y``ž`gcbXYfb  
Ui W`Y]bY`; Y`Y[ Yb\`Y]h`ZØf`X]Y`J YfY]bYž`g]W`a ]h]fYf`7ca a i b]hm  
ni `j YfV]bXYb`i bX`Y]bY`d cg]h]j Y`5ha cgd\`ÀfY`]a `i » VU``\_fY]g  
<Ua a `ni `ZØfXYfb``9g`V`Y]Vh`UVni k UfhYbž`k ]Y`g]W`X]Y`DUfh]Y  
Ybhk ]W\_Y`b`k ]fX`i bX`k Y`W`Y`@Y\`fYb`X]Y`HYUa g`XUfUi g`n]Y\`Yb  
\_ØbbYb"

8YhU]g

6Ygi W\Yb`G]Y`i bg`Ui Z.`b!U[ "XY