

@Ughk U[Ybi bZU``']b '? YfdYb. '6U\ bghfYW_Y
V]g'Ui Z'K Y]hYfYg'[YgdYffh

9]b '@Ughk U[Yb'ghØfnh'Ui Z'X]Y'6U\ bghfYW_Y '? Ò'b!5UWYbž
j Yfi fgUW h'J Yf'Yhni b[Yb'i bX'Yf\YV`]WXY
J Yf_Y\fgVYY]bhfÀW h][i b[Yb"

9]b'gWk YfYf'i bZU``']a 'bcfXf\Y]b!k YghZÀ`]gWYb'?'YfdYb'\Uh
Yf\YV`]WXY'5i gk]f_i b[Yb'Ui Z'XYb'6U\bj Yf_Y\f'nk]gWYb'?'Ò'b
i bX'5UWYb'"9]b '@Ughk U[Yb'ghØfnh'Ua ' : fY]hU[a]hU['j cb'Y]bYf
6fØW_Y'i bX'UbXYhY'Ui Z'XYb'; `Y]gYbž'X]Y'Ui W'ZØf'XYb
<cW [YgWk]bX][_Y]hgj Yf_Y\f'XYf'⇒9']b 'F]W hi b['6fØggY`
[Ybi hnh'k YfXYb'"8]Y ; `Y]gY'V`Y]VYb'V]g'Ui Z'K Y]hYfYg'[YgdYffhž
k cXi fW 'Yg'ni 'a Ugg]j Yb'J YfgdÀhi b[Yb'i bX'5i gZÀ`Yb']a ' : Yfb!
i bX'FY []cbU'j Yf_Y\f'_ca a h"

8Yf': U\ fYf'XYg'@_k ž'Y]b' (&!`À\ f][Yf'A Ubbž'Yf']hh'VY]'XYa
Nk]gWYbZU``']gWk Yfk]Y[YbXY'J Yf'Yhni b[Yb'i bX'VYZ]bXYh'g]W
a]h'Yfk Y]Y'i bhYf']bhYbg]j a YX]n]b]gWYf'6Y\UbX'i b["'9]b
8fc[YbhYghž'XYf']a ' ? fUb_Yb\Ui g'Xi fW [YZØ\fh'k i fXYž'Z]Y`dcg]h]j
Ui gž'k Yg\U'V'bi b'Y]bY'6'i hYbhbU\ a Y'Ub[YcfXbYh'k i fXY'"8]Yg
_ÖbbhY'a Ò[`]WYfk Y]gY'ni 'k Y]hYfYb'fYW h']WYb'?'cbgYei YbnYb
ZØf'XYb': U\ fYf'ZØ\ fYb"

6U\bj Yf_Y\ f'ghUf_ 'VYY]bhfÀW h][h

5i Z[fi bX'XYg'i bZU``']g]bX'X]Y'5i gk]f_i b[Yb'Ui Z'XYb'6U\ bVYhf]YV
Yf\YV`]WXY'"5`Y'⇒9!NØ[Yž'X]Y'nk]gWYb'?'Ò'b'i bX'6fØggY`
j Yf_Y\ fYbž'a ØggYb'i a [Y'Y]hYh'k YfXYb'i bX'j YfgdÀhYhYb'g]W']a
8i fW gW b]hhi a 'Yhk U' - \$'A]bi hYb'"5i » YfXYa 'YbXYb'j]Y'Y'⇒!
NØ[Y'VYfY]hg]b'?'Ò'b'i bX'VYX]YbYb'b]W h'X]Y'<U'hYghY`Yb'8ØfYb
i bX'5UWYb'"8]Yg'ZØ\fh'ni 'Y]bYf'ni gÀhn`]WYb'6Y'Ughi b['XYf

F Y]gYbXYbž'X]Y 'g]W\ 'Ui ZU'hYfbUh]j Y 'J Yf_Y\fga Ò['W\ _Y]hYb
Y]bghY''Yb'a ØggYb"

⇒ 'FY[]cbUj Yf_Y\ f'ghY''h'X]Y'8Yi hgW\Y'6U\ b'Y]bYb
GW\]YbYbYfgUhmj Yf_Y\ f'a]h'6i ggYb'nk]gW\Yb'8ØfYb'i bX'? Ò'b
gck]Y'< cffYa 'i bX'? Ò'b'VYfY]h'5i W\ 'X]Y'J YfV]bXi b['ni a ' < U'h
'? Ò'b!9\ fYbZY'X']gh'j cb'XYf'GdYffi b['VYhfcZYbž'k Ug'X]Y'G]hi Uh]cb
ZØf'DYbX'Yf'i bX'FY]gYbXY'bcW\ '_ca d'n]YfhYf'a UW\ h"

6Yf[i b[ga U» bU\ a Yb' i bX': c`[Yb'ZØf'X]Y

⇒bZfUghfi _hi f

8]Y'6Yf[i b['XYg'@_k 'ghY''h'ZØf'X]Y'6U\ b'Y]bY'Xf]b[YbXY'Df]cf]hÅh
XUF" K]f'd'UbYb'ni f'NY]h'X]Y'6Yf[i b['a]h'Y]bYa ' ?fUb'Xi fW\ 'X]Y
6U\ b'i bX'\cZYbž'XUgg'X]Y'GhfYW_Y'gc'gW\ bY''k]Y'a Ò['W\ 'k]YXYf
j YfZØ[VUF']gh ž'Yf_`ÀfhY'Y]bY'6U\ bgdfYW\Yf]b"8Yf'@_k
hfUbgdcfh]YfhY' (\$'HcbbYb'; fUbi 'Uhž'XYggYb'K]YXYfVYgW\ UZi b[
YVYbZU''g'bchk YbX][']gh'; 'ØW_]W\ Yfk Y]gY' [Y\h'j cb'X]YgYf': fUW\ h
Y]bY'; YZU\ f'Ui g/'YXcW\ ']gh'XYf'?fUZhgchcZzUb'XYg'@Ughk U[Ybg
VYgW\ ÅX][h'i bX'Yg'VYghUbX'X]Y'; YZU\ f'j cb'Ui g[Y'Ui ZYbYa
HfY]VghcZz'k Ug'ni gÅh'W\ Y'G]W\ Yf\Y]hgj cf_Y\fi b[Yb'YfZcfXYf']W\
a UW\ h"

8]Y'C VYf'Y]hi b[Yb'XYf'6U\ bgdfYW_Y'k i fXYb'YVYbZU''g']b
A]h'Y]XYbgW\ UZi[Ync[Ybž'gcXUgg'X]Y'j c''ghÅbX][Y
K]YXYf\YfghY''i b['XYf'⇒bZfUghfi _hi fYb'Yfgh'bUW\ 'XYf'6Yf[i b['XYg
@_k 'i bX'XYf'[fØbX']W\ Yb'I bhYfgi W\ i b['XYf'; 'Y]gY'VY[]bbYb
_Ubb"@Ui h'XYf'Dfc[bcgY'XYg'⇒bZfUghfi _hi fVYhfY]VYfg'k]fX'X]Y
GhfYW_Y'j cfUi gg]W\ h']W\ 'V]g'a]bXYghYbg'ni a '9bXY'XYg'HU[Yg
[YgdYffh'V'Y]VYbž'i bX'X]Y'6Y]bhfÅW\ h][i b[Yb'_ØbbhYb'Ui W\ 'XYb
6Yhf]YV'Ua 'Zc'[YbXYb'HU['VYhfYZYb"

9]b'k Y]hYfYf'5gdY_h'g]bX'X]Y'j YfnÒ[YfhYb'NØ[Y. '@Ui h'6Yf]W\ hYb
VYZU bX'g]W\ 'Y]b'Ni ['a]h'Yhk U'* \$'DUggU[]YfYb']b'XYf'BÅ\Y'XYf
I bZU''ghY''Yž'XYf'Ui Z[fi bX'XYf'<cW\ gdUbbi b[g'Y]hi b[Yb'gY]bY
: U\ fh'b]W\ h'ZcfhgYhnYb'_cbbhYž'XU'X]YgY'Ui g'G]W\ Yf\Y]hg[fØbXYb
[YYfXYh'k YfXYb'a i gghYb"

NYi [Yb`VYf]W hYhYbž`XUgg`XYf`@_k` [Y [Yb`%%.) \$`I` \f`Ui`ZY]bYf`
 , VYfZØ\fi b [`j`cb`XYf`GhfU»Y`UV_Ua`ž`XUg`6fØW_Yb [Y`AbXYf`
Xi fW`VfUW`i`bX`Ui`ZX]Y` ; `Y]gY`ghØfnhY`"8]Y` [YbUi`Yb`i`a`gh`AbXY`
XYg`i`bZU``g`g]bX`bcW`i`b`_Ufž`YXcW`k`i`fXY`X]Y`Dc`nY]`
VYUi`ZhFU [hž`X]Y`9fa`]h`i`b [Yb`k`Y]hYf`j`cfU`bni`hfY]VYb`"

: Un]h`i`9]b`?`ca`d`Yi`Ui`g`G]W`Yf`Y]h`i`bX`
=bZfUghfi`_hi`f`

8Yf`Nk`]gW`YbZU``]b`?`YfdYb`]gh`b]W`h`bi`f`Y]b`VYXUi`Yf`]W`Yf`i`bZU``ž`
gcbXYfb`k`]fZi`Ui`W`i` :`fU [Yb`ni`f`G]W`Yf`Y]h`]a` `GhfU»Yb`j`Yf`_Y`f`i`bX`
XYb`Ni`ghUbX`XYf`=bZfUghfi`_hi`f`Ui`Z`A`]h`Y]bYa`i` [fc»Yb`i` :`U`fnYi` [`
Ui`ZY]bYf`6fØW_Yž`X]Y`ØVYf`k`]W`h] [Y`j`Yf`_Y`f`gk`Y [Y`ZØ`fhž`ghY``h`
g]W`X]Y` :`fU [Yž`cV`XYfUfh] [Y`i`bZÄ``Y`]b`Ni`_i`bZi`VYggYf`j`Yf`Y]bXYfh`
k`YfXYb`_ØbbYb`"8]Y`B`chk`YbX] [_Y]h`gW`bY``Yf`i`bX`YZZY`_h]j`Yf`
6Yf [i`b [ga`U»bU`a`Yb`k`]fX`Y]Yf`XYi`h`]W`ž`i`a`XYb`fY]Vi`b [g`cgYb`
6Yhf]YV`XYg`6U`b]Yf`_Y`f`g`g]W`Yf`ni`ghY``Yb`"

: U`fnYi` [i`bZÄ``Y`Ui`Z`6U`bghfYW`_Yb`

I`bZÄ``Y`a`]h`i` :`U`fnYi` [Yb`Ui`Z`6U`bghfYW`_Yb`]bX`
VYXUi`Yf`]W`Yf`k`Y]gY`b]W`h`i`b [Yk`Ø`b`]W`"Gi`W`j`cfZÄ``Y`_ØbbYb`
YfbghY`5i`gk`]f`_i`b [Yb`Ui`ZX]Yb`ØZZYbh`]W`Yb`j`Yf`_Y`f`i`bX`X]Y`
G]W`Yf`Y]h`XYf` :`U`f [ÄghY`UVYb`"9]b`VYa`Yf`_Y`bgk`YfhYg`6Y]gd]Y`
YfY] [bYhY`g]W`]a`i`j`f`&\$%-`ž`U`g`Y]b`@Ughk`U [Yb`Ua`i`6U`b`cZ]`cb`
8i`]gVi`f [`Ui`ZX]Y` ; `Y]gY`ghØfnhY`ž`k`Ug`Ä`b`]W`Y`GhØfi`b [Yb`]a`
6U`b]Yf`_Y`f`bUW`g]W`nc ["8Yf`j`cfZU``ZØ`fhY`ni`Yf`YV`]W`Yb`
j`Yfgd`Ähi`b [Yb`i`bX`i`a`Y]hi`b [Yb`ž`k`Ä`fYbX`X]Y`6Yf [i`b [gUfVY]hYb`
X]Y` [YgUa`hY`B`UW`h]b`5bgdfi`W`bU`a`Yb`"8]YgY`9fY] [b]ggY`
j`YfXYi`h`]W`Yb`ž`k`]Y`_f]h]gW`X]Y`G]W`Yf`Y]hgj`cf`_Y`f`i`b [Yb`Ub`
6U`bØVYf [Äb [Yb`i`bX`6fØW_Yb`g]bX`i`bX`k`]Y`k`]W`h] [`Y]b`
fY]Vi`b [g`cgYf`=bZcfa`Uh]cbgZi`gg`nk`]gW`Yb`6U`bi`bhYfbY`a`Yb`i`bX`
j`Yf`_Y`f`ghY`]bY`a`Yfb`]gh`"

=a`j`Yf [`Y]W`ni`ZfØ`YfYb`i`bZÄ``Yb`nY] [h`g]W`ž`XUgg`X]Y`9]bZØ`fi`b [`
bYi`Yf`HYW`bc`c []Yb`ž`k`]Y`Yhk`U`Ui`hca`Uh]gW`Y`K`UfbgmghYa`Y`ZØf`
 :`U`fnYi` [ZØ`fYfž`]b`Y]b] [Yb`FY []cbYb`YfZc` [fY]W`ni`f`FYXi`n]Yfi`b [

gc`WXYf`J cfZÄ`Y`VY][YhfU[Yb`U`h"8YbbcW`V`Y]Vh`X]Y`9fa`]h`i`b`
XYf`i`bZU`i`fgUWXY`YggYbh]Y`ž`i`a`ni`_ØbZh][`VYggYfY
DfÄj`Ybh]cbga`U»bU`a`Yb`Yf[fY]ZYb`ni`_ØbbYb"8Yf`U`hi`Y`Y
J cfZU`i`b`?YfdYb`k`]fX`YVYbZU`g`[YbUi`i`bhYfgi`W`hž`i`a`Ä`b`]WXY
I`bZÄ`Y`ni`j`Yf`bXYfb"

9]bZ`i`gg`Ui`Z`X]Y`J`Yf`_`Y`f`g]bZfUghfi`_`hi`f`

8]Y`5i`gk`]f`_i`b`[Yb`j`cb`i`bZÄ`Yb`k`]Y`XYa`i`b`?YfdYb`[Y`Yb`ØVYf`
i`ba`]hhY`VUFY`J`YfgdÄhi`b`[Yb`U`]bUi`g"5V[YgY`Yb`j`cb`XYb`?cghYb`
ZØf`6Yf`[i`b`[i`bX`FYdUfUhi`f`XYf`VYgW`ÄX][hYb`bZfUghfi`_`hi`f`
_ØbbYb`Ui`W`U`b`[Zf]gh][Y`5i`gk`]f`_i`b`[Yb`Ui`Z`X]Y
J`Yf`_`Y`f`g]bZfUghfi`_`hi`f`i`bX`XUg`J`YfhfUi`Yb`XYf`i`U`f`[ÄghY`]b`
ÖZZYbh]WXY`J`Yf`_`Y`f`ga`]hhY`Ui`ZhfYhYb"8Gc`WXY`J`cfZÄ`Y`_ØbbYb`ni`
Y]bYa`F`ØW`[Ub`[XYf`i`U`f`[UghnU`Yb`ZØ`fYbž`k`Ug`gW`Y]Y»`]W`X]Y
9]bbU`a`Yb`XYf`6U`bi`bhYfbY`a`Yb`VYY]bhfÄW`h][h"8]Y`8Yi`hgWXY`
6U`b`i`bX`UbXYfY`5bV]YhYf`ghY`Yb`j`cf`XYf`<YfUi`gZcfXYfi`b`ž`XUg`
J`YfhfUi`Yb`XYf`Bi`hYf`Xi`fW`ni`j`Yf`Ägg][Yb`GYfj`]W`
ni`fØW`ni`[Yk`]bbYbž`k`Ä`fYbX`g]Y`[`Y]W`nY]h][`X]Y`G]WXYf`Y]h`
df]cf]g]YfYb"

Ni`gÄhn`]W`j`Yfi`fgUWXYb`]bYZZ]n]YbhY`J`Yf`_`Y`f`gVYX]b`[i`b`[Yb`cZh`
A`Y`f`_`cghYb`ZØf`X]Y`i`YgY`gW`UZh"@Ui`h`XYf`6i`bXYgnYbhfU`Y`ZØf`
dc`]h]gWXY`6]Xi`b`[`_ØbbYb`Xi`fW`Ni`[Ui`gZÄ`Y`i`bX`
J`YfgdÄhi`b`[Yb`b]W`h`bi`f`i`U`f`[UghnU`Yb`ž`gcbXYfb`Ui`W`X]Y`
[YgUa`hY`FY`[]cb`k`]fhgW`UZh]W`VYY]bhfÄW`h][h`k`YfXYbž`XU`DYbX`Yf`
i`bX`Hci`f]ghYb`UV`[YgW`fYW`h`k`YfXYb"

F`Y`U`_`h]cbYb`XYf`2`ZZYbh`]W`_`Y]h`i`bX`XYf` 6U`bi`bhYfbY`a`Yb`

B`UW`XYa`i`J`cfZU`i`b`?YfdYb`UVYb`gck`c`l`6Øf`[Yf`U`g`Ui`W`
cZZ]n]Y`Y`GhY`Yb`i`fY`6Ygc`f`[b]g`ØVYf`X]Y`G]WXYf`Y]h`Ui`Z`
6U`bghfYW`Yb`[YÄi`»Yfh"8Yf`i`U`k`]fX`b]W`h`bi`f`j`cb`XYb`
6Y`ØfXYbž`gcbXYfb`Ui`W`j`cb`i`U`f`[ÄghYb`[YbUi`j`YfZc`[hž`X]Y`
Y]bYb`5bgh]Y`[XYf`G]WXYf`Y]h]ga`U»bU`a`Yb`ZcfXYfb"9]b][Y`gc`n]U`Y`
A`YX]Yb`g]bX`VYfY]hg`a`]h`8]g`_i`gg]cbYb`ØVYf`

G]WYf\Y]hgj cf_Y\fi b[Yb'i bX'X]Y' < UZhi b['XYf'VYhfc ZYbYb
I bhYfbY\ a Yb'ØVYfZi hYh"

8]Y'6U\bi bhYfbY\ a Yb'ghY\Yb'i bhYf'8 fi W_ž']\fY
G]WYf\Y]hgf]W\h]b]Yb'ni 'ØVYfd fØZYb'i bX'hfUbgdUfYbh'ØVYf'X]Y
9f[YVb]ggY'XYf'9fa]hhi b[Yb'ni ']bZcfa]YfYb""9]bY'_UfY
?ca a i b]_Uh]cb'ØVYf'X]Y': cfhgW\ f]hhY'VY]'XYf'6Yf[i b['i bX
Yj Ybhi Y''Y'A U» bU\ a Yb'ni f'J YfVYggYfi b['XYf'J Yf_Y\fgg]WYf\Y]h
_ØbbhY'XUni 'VY]hfU[Ybž'XUg'J YfhfUi Yb'XYf'² ZYbh']W\ _Y]h
ni fØW_ni [Yk]bbYb'i bX'À\b']WY'J cfZÀ''Y']b'XYf'Ni _i bZh'ni
j Yfa Y]XYb"

8YhU]`g

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