

F \ Y]b! < i b g f Ø W _ ! ? f Y] g ' Y b h X Y W _ Y b . ' B U h i f ž
; Y g W X] W X h Y ' i b X ' ; U i a Y b Z f Y i X Y b

9 b h X Y W _ Y b ' G] Y ' X] Y ' G W X Ø b \ Y] h Y b ' X Y g ' F \ Y] b ! < i b g f Ø W _ !
? f Y] g Y g . ' B U h i f k i b X Y f ž ' \] g h c f] g W X Y ' 6 i f [Y b ž ' _ i '] b U f] g W X Y
<] [\ '] [\ h g ' i b X ' j Y f g h Y W _ h Y ' 5 i g Z i [g n] Y ' Y ' k U f h Y b ' U i Z G] Y °



8 Y f ' F \ Y] b ! < i b g f Ø W _ ! ? f Y] g ž ' Y] b ' k U \ f Y g ' ž k Y ' ' j a ' ' < Y f n Y b
8 Y i h g W X ' U b X g ž ' V] Y h Y h ' Y] b Y ' d Y f Z Y _ h Y ' A] g W X i b [' U i g
U h Y a V Y f U i V Y b X Y f ' B U h i f ž ' f Y] W X Y f ' ; Y g W X] W X h Y ' i b X ' _ i '] b U f] g W X Y b
? Ø g h] W X _ Y] h Y b " 8] Y g Y ' F Y [] c b ž ' X] Y ' c Z h] j a ' G W X U h Y b '] \ f Y f
V Y _ U b b h Y f Y b ' B U W V U f b ' g h Y \ h ž ' \ U h ' g c ' j] Y ' n i ' V] Y h Y b ž ' X U g g ' g] Y
Y] b Y b ' D ' U h n ' U i Z X Y] b Y f ' F Y] g Y ! H c ! 8 c ! @ g h Y ' j Y f X] Y b h ' \ U h ' J c b ' X Y b
g U b Z h Y b ' < Ø [Y ' b ' X Y g ' < i b g f Ø W _ g ' V] g ' \] b ' n i ' X Y b
[Y g W X] W X h g h f Å W X h] [Y b ' 6 i f [Y b ' Y b h ' U b [' X Y g ' F \ Y] b g ž [] V h ' Y g ' \] Y f
i b n Å \ '] [Y ' A Ø ['] W X _ Y] h Y b ž ' X] Y ' G Y Y ' Y ' V U i a Y ' b ' n i ' ' U g g Y b ' i b X ' g] W X
[' Y] W X n Y] h] ['] b ' X] Y ' j] Y ' Z Å ' h] [Y ' ? i ' h i f ' X Y f ' F Y [] c b ' n i ' j Y f h] Y Z Y b "

≠ X] Y g Y a ' 5 f h] _ Y ' b Y \ a Y b ' k] f ' X] W X ' a] h ' U i Z Y] b Y ' 9 b h X Y W _ i b [g f Y] g Y
X i f W X ' X Y b ' F \ Y] b ! < i b g f Ø W _ ! ? f Y] g " K] f ' Y f _ i b X Y b ' X] Y

VYY]bXfi W_YbXYb`BUhi fk i bXYfž`k YfZYb`Y]bYb`6`]W_]b`X]Y
J Yf[Ub[Yb\Y]h'a]h'a U`Ygh`h]gW`Yb`GW`OggYfb`i bX`6i f[Ybž
dfcV]YfYb`gW`a UW_\UZhY`c_U`Y`GdYn]U`h`hYb`]b`Y]b`UXYbXYb
F YghUi fUbhg`i bX`Yf`_i bXYb`a U`Yf]gW`Y`K UbXYf!`i bX`F`UXk Y[Y"
Ni XYa`nY][Yb`k]f`X]f`X]Y`YVYbX][Yb`J`YfUbghU`hi b[Ybž`X]Y`XUg
_i`hi fY`Y`9fVY`XYf`F`Y[]cb`YVYbX][`U`hYbž`i bX`df`gYb]YfYb`X]f
Y]b][Y`[Y\Y]a`Y`GW`h`hY`UVgY]hg`XYf`ØV`]W`Yb`Hci f]ghYbghf`Øa`Y"
A UW`X]W`VYfY]h`ZØf`Y]b`i bj`Yf[Ygg`]W`Yg`5VYbhYi`Yf`

9bhXYW_i b[`XYf`BUhi fk i bXYf`]a `F`Y]b!

< i bgfØW_!`? fY]g

⇒ a`<YfnYb`j`cb`F`Y]b`UbX!DZU`n`]Y[h`XYf`a`U`Yf]gW`Y`F`Y]b!
< i bgfØW_!`? fY]gž`Y]b`j`YfVcf[YbYg`ž`k`Y`ž`XUg`a`]h`gY]bYf
UhYa`VYfUi`VYbXYb`BUhi`f`i`bX`j`Y`Z`h][Yb`@UbXgW`UZhYb
VY[Y]ghYfh`"8]Y`F`Y[]cb`]gh`VY`_Ubbh`ZØf`]fY`i`bVYfØ`fhY`BUhi`fž`X]Y
Y]bY`J`Y`nU`\`j`cb`9f`YVb]ga`Ø[`]W`_Y]hYb`V]YhYh`"C`V`a`U`Ygh`h]gW`Y`
K`h`XYfž`[`]hYfbXY`:`ØggY`cXYf`gUbZhY`<Ø[Y`XYf`< i bgfØW_`\Uh
ZØf`BUhi`fZ`Yi`bXY`Y]b][Yg`ni`V]YhYb`"

9]bYg`XYf`VY`_UbbhYghYb`BUhi`fk`i`bXYf`X]YgYf`F`Y[]cb`]gh`XYf`
< i bgfØW_!`< cW`k`U`X`BUh]cbU`dUf`_ž`XYf`]a`Y`f`&`\$\$)
[Y[fØbXYh`k`i`fXY`"A`]h`gY]bYb`ØVYfk`h][YbXYb`K`h`XYfbž
nU`\fY]W`Yb`K`UbXYfk`Y[Yb`i`bX`Y]bYf`J`]Y`nU`\`Ub`:`cfU`i`bX`:`Ui`bU
n]Y`h`Yf`6Ygi`W`Yf`Ui`g`XYf`[Ubnyb`K`Y`h`Ub`"8Yf`BUh]cbU`dUf`_]gh
Y]b`k`]W`h][Yf`@VYbYb`gfUi`a`ZØf`VYXfc`hY`H]YfUfhYb`k`]Y`XYb`
A`i`ZZ`cb`i`bX`j`YfgW`]YXYbY`GW`a`YhYf`]b[gUfhYb`"8]Y`9f`U`hi`b[
X]YgYf`BUhi`fj`]Y`ZU`h`ghY`h`]a`A`]hY`di`b`h`XYf`DUf`_j`Yfk`U`hi`b[ž`X]Y
Ui`»YfXYa`[YZØ`fhY`Hci`fYb`i`bX`gdUbbYbXY
⇒ Zcfa`Uh]cbgdfc[fUa`a`Y`UbV]YhYh`"

B]W`h`bi`f`XYf`BUh]cbU`dUf`_`cW`_h`Ci`hXccf!9bh`i`g]UghYb`]b`XYb
F`Y]b!< i bgfØW_!`? fY]g`"8]Y`6]c`gd`\`h`fY`6`]Yg[Ui`ž`X]Y`Ub`X]Y
F`Y[]cb`Ub[fYb`nhž`V]YhYh`YVYbZU`g`Y]bXfi`W`_gj`c`Y`@UbXgW`UZhYb`
<]Yf`_Ubb`a`Ub`X]Y`UhYa`VYfUi`VYbXYb`DUbcfUa`Yb`XYf`6`]Yg`i`bX
XYb`Y]bn][Ufh][Yb`F`YgYfj`YfUYi`a`K`U`X`Yf`YVYbž`k`c
GhfYi`cVghk`]YgYb`i`bX`:`Yi`W`h[YV]YhY`Y]b`Y]b`UXYbXYg`<UV]hUh`ZØf
j`]Y`Y`H]YfUfhYb`V]YhYb`"

8]Y`FY[]cb`]gh`Ui W`VYfØ\`a h`ZØf`X]Y`HfUi a gW`Y]ZYbž`Y]b
 BYhmk Yf`_j cb`K UbXYfk Y[Ybž`X]Y`Xi fW`UhYa VYfUi VYbXY
 @UbXgW`UZhYb`i bX`\]ghc]gW`Y`C fhY`ZØ\`fYb" :XY`HfUi a gW`Y]ZY
 \Uh`\fYb`Y][YbYb`7\`UfU`hYf`i bX`]\fY`Y][YbYb`<][\`][\hg"Ni a
 6Y]gd]Y`V]YhYh`X]Y`HfUi a gW`Y]ZY` K U`X!Fi bXk Y[`Y]b
 fi \][Yg`K UbXYfYf`YVb]g`Xi fW`X]W`hY`K A`XYfž`k A`fYbX`X]Y`
 HfUi a gW`Y]ZY` : Y`gYbk Y[`a]h`VYY]bXfi W`YbXYb
 : Y`gZcfa Uh]cbYb`i bX`\Yff`]W`Yb`5i gg]W`hYb`Ui Z`XUg`l a `UbX
 Ui Zk UfhYh" <]Yf`Y]bY`_Y]bY` , VYfg]W`h`XYf`VY`_Ubb`hY`ghYb
 HfUi a gW`Y]ZYb`]a `F`Y]b!<i bgfØW`!`?fY]g.

HfUi a gW`Y]ZY	GW`k]Yf][_Y]hg[fUX	8Ui Yf`fA]bi hYbŁ
K U`X!Fi bXk Y[@Y]W`h	- \$
: Y`gYbk Y[A]hY`	%&\$
F`Y]bV`]W`_	GW`k]Yf][%, \$
5`hghUXh!Hci f	@Y]W`h	* \$

9]b`k Y]hYfYg`BUhi fk i bXYf`]a `F`Y]b!<i bgfØW`!`?fY]g`]gh`X]Y`
 GW`k UfnVUW`gW`i W`h"8]YgY`VYY]bXfi W`YbXY`GW`i W`hž`X]Y
 g]W`nk]gW`Yb`XYb`C fhYb`G]a a Yfb`i bX`<i bgfØW`_`Ø\`Yb
 YfghfYW`hž`]gh`Y]b`VY`YVhYf`C fh`ZØf`K UbXYfYf"8Yf`K Y[`ZØ\`h
 Ybh`Ub[`gdfi XY`bXYf`6AW`Y`i bX`j YfnUi VYfh`a]higY]bYa
 gW`Uhh][Ybž`a ccgVYk UW`gYbYb`l bhYf[fi bX" <]Yf`_Ubb`a Ub`XUg
 gUbZhY`D`ÀhgW`Yfb`XYg`K UggYfg`\ØfYb`i bX`X]Y`Fi \Y`XYf`BUhi f
 [Yb]Y»Yb"

: Øf`@YV\UVYf`XYf`VYgcbXYfYb` : `cfU`g]bX`X]Y`K]`XYb`C fW`]XYYb
]b`XYf`FY[]cb`Y]b`k Y]hYfYg`<][\`][\h"6YgcbXYfY`GW`i hn[YV]YhYž
 k]Y`XUg`BUhi fgW`i hn[YV]Yh`<i bgfØW`_Yf`<cW`k U`Xž]g]bX`<Y]a Uh
 ZØf`j YfgW`]YXYbY`C fW`]XYYbUfhYbž`X]Y`]b`XYb`A cbUhYb`5df]`i bX
 A U]V`Ø\`Yb"8]Y` : chc[fUZ]Y`X]YgYf`gY`hYbYb`6`i a Yb`]gh`Y]b
 VY`YVhYg`A ch]j `ZØf`BUhi fZchc[fUZ]b`i bX`6chUb]_Yf
 [`Y]W`Yfa U»Yb"

8]Y`UhYa VYfUi VYbXY`@UbXgW`UZh`XYg`F`Y]b!<i bgfØW`!`?fY]gYg`]gh
 ni XYa `j cb`Y]bYf`J]Y`nU`\`j cb`FUX!`i bX`K UbXYfk Y[Yb
 Xi fW`nc[Ybž`X]Y`Yg`XYb`6Ygi W`Yfb`Yfa Ø[`]W`Ybž`X]Y`bUhØf`]W`Y
 GW`Øb\Y]h`XYf`FY[]cb`]b`]fYa `Y][YbYb`HYa dc`ni `Yf`_i bXYb"8Yf`

F \ Y]b fUXk Y[' VY]gd]Y`gk Y]gY`YfghfYW_h]g]W\`Ybh`Ub[`XYg
a U`Ygh`h]gW\Yb`F \ Y]bg`i bX`V]YhY`h`b]W\h`bi f`UhYa VYfUi VYbXY
5i gV`]W_Y`z`gcbXYfb`Z\`fh`Ui W\`Xi fW\`W`Ufa UbhY`8`OfZYfz`]b`XYbYb
`c_U`Y`GdYn]U`]h`hYb`i bX`[i hY`K`Y]bY`j Yf_cghY`h`k YfXYb`_`ObbYb"

Ni gUa a YbZUggYbX`>`Aggh]g]W\`gU[Ybž`XUgg`XYf`F \ Y]b!<i bgfØW`!
?fY]g`Y]b`A`Y`__U`ZØf`B`Uhi f`]YV\UVYf`i bX`5`_hj`Y`]gh`"8]Y
?ca V]bUh]cb`Ui g`i bVYfØ\`fhYf`B`Uhi fž`gdUbbYbXYb`K`UbXYf!`i bX
FUXk Y[Yb`gck]Y`Y]bYf`J]Y`nU\`j cb`:`c`fU`i bX`:`Ui bU`a UW\`h`X]Y
FY[]cb`ni `Y]bYa `a i gh]j]g]h`N]Y`ZØf`FY]gYbXYž`X]Y`Ui ZXyf`Gi W\Y
bUW`9f\`c`i b[`cXYf`5VYbhYi Yf`g]bX`"K`Yf`Y]b`k`Yb][`NY]h`]b`X]YgYf
gW\]a a YfbXYb`C`UgY`XYf`B`Uhi f`j YfVf]b[hž`k]fX`a]h`G]W\Yf\`Y]h`X]Y
GYY`Y`V`Ui a Y`b`UggYb`i bX`XUg`<Yfn`Ub`X]Y`GW\`Ob\`Y]h`XYf`K`Y`h
ni fØW`YfcVYfb"

9]b`6`]W`_]b`X]Y` ; YgW\]W\`hY.`6i f[Yb`i bX
GW\`ØggYf`XYf`F`Y[]cb

8Yf`F \ Y]b!<i bgfØW`!`?fY]gž`Y]bY`FY[]cb`]b`F \ Y]b`UbX!DZU`nž`]gh
b]W\h`bi f`ZØf`gY]bY`UhYa VYfUi VYbXYb`B`Uhi f`UbXgW\UZhYb
VY`_Ubbhž`gcbXYfb`Ui W\`ZØf`gY]bY`fY]W\Y`i bX`j]Y`Z`h`[Y
; YgW\]W\`hY`"8]YgY`k]fX`VYgcbXYfg`YVYbX][`Xi fW\`X]Y
nU\`fY]W\Yb`6i f[Yb`i bX`GW\`ØggYfž`X]Y`XYb`<i bgfØW`_d`fÀ[Yb`
`b`X]YgYa `5VgW\`b]h`h`bY\`a Yb`k]f`G]Y`a]h`Ui ZY]bY`FY]gY`ni
Y]b][Yb`XYf`ZUgn]b]YfYbXghYb`\]ghc`f]gW\Yb`Gh`h`hYb`XYf`F`Y[]cbž`X]Y
j`cb`j Yf[Ub[YbYf`DfUW\`h`i bX`ghfUHY[]gW\Yf`6YXYi hi b[`Yfn`h`\`Yb"

9]b`\YfUi gfU[YbXYg`6Y]gd]Y`]gh`X]Y`6i f[`GhU\`YW`_ž`X]Y
a U`Ygh`h]gW\`ØVYf`XYa `fca Ubh]gW\Yb`F \ Y]bhU`h`fcbh`"8]YgY`6i f[
k i fXY`ja `"%&"`>U\`f\i bXYfh`YfVUi hi bX`gd]Y`hY`Y]bY`VYXYi hYbXY
F`c`Y`]b`XYf` ; YgW\]W\`hY`XYf`F`Y[]cb`" `fY`a`Ui YfUfh][Yb
Ghfi _hi fYb`i bX`XYf`ja`d`cgUbhY`6Yf[Zf]YX`nYi [Yb`j`cb`XYf
j`Yf[Ub[YbYb`K`Y\`f\UZh][_Y]h`<Yi hY`VY\`YfVYf[h`X]Y`6i f[`Y]b
`> [YbX\`YfVYf[Yž`k Ug`VYXYi hYhž`XUgg`6Ygi W\Yf`X]Y` ; Y`Y[Yb\`Y]h
\UVYbž`]ba]hYb`j`cb` ; YgW\]W\`hY`ni `ØVYfbUW\`hYb`"8Yf`6`]W`_Ui Z
XUg`F \ Y]bhU`j`cb`XYf`6i f[`Ui`g]gh`Y]bZUW\`UhYa VYfUi VYbX`i bX
Y]b`9f`YVb]gž`XUg`a`Ub`b]W\`hj`YfdUggYb`gc`hY"

9]bY`k Y]hYfY`VYY]bXfi W_YbXY`6i f[`]gh`X]Y`6i f[`H\i fUbhž`X]Y`Ua
I ZYf`XYf`A cgY``]b`5`_Yb`ghY`h`8]YgY`6i f[`]gh`VYgcbXYfg`ZØf`]\fY
[i h`Yf`U`hYbYb`HØfa Y`VY`_Ubbh`i bX`ghY``h`Y]bYb`\\Yfj cffU[YbXYb
6Y]gd]Y``ZØf`X]Y`5fW`hY`_hi f`XYf`ZfØ`Yb`XYi hgW`Yb`6i f[Yb`XUf``8]Y
6i f[`V]YhYh: Ø\fi b[Yb`Ubž`X]Y`9]bV`]W_Y`]b`XUg`@YVYb`k Å\fybX
XYg`A]hY`U`hYfg[YVYb``9]b`< Ø\Ydi b`_h]gh`XYf`6Ygi W`XYf
cZYbYb`5`hghUXhij cb`5`_Yb`a]h`]\fyb`a U`Yf]gW`Yb`; UggYb`i bX
\]ghcf]gW`Yb`; YVÅi XYb"

Ni gÅhn`]W`n]Y`h`X]Y`6i f[`?i Yg`X]Y`6Ygi W`Yf`Ubž`X]Y`X]Y
J YfV]bXi b[`nk]gW`Yb`?i`hi`fi`bX`; YgW`]W`hY`gi W`Yb``G]Y`VYZ]bXYh
g]W`i]b`6Yfb`_UghY`!`?i`Yg`i`bX`]gh`Y]b`K U`fnY]W`Yb`XYg`A cgY`hU`g`
8]YgY`6i f[ž`X]Y`Ui Z`XUg`%(``\f\i bXYfh`ni fØW_[Y`hž`k i fXY
gck c`\\U`g`J YfhY]X][i b[gVUi `U`g`Ui W`U`g`K c`bg]hn[Ybi hnh`
<Yi hY`_ØbbYb`X]Y`6Ygi W`Yf`X]Y`U`hYb`?Y``Yf`VYg]W`h][Yb`i`bX
a Y`f`ØVYf`X]Y`; YgW`]W`hY`i`bX`X]Y`@Y[YbXYb`YfZU`fYbž`X]Y`g]W`
i`a`X]YgYb`C`fh`fUb`_Yb"

K Ybb`G]Y`k Y]hYf`]b`X]Y`; YgW`]W`hY`XYg`<i`bgfØW`_g`Y]bhUi W`Yb
a ØW`hYbž`]gh`Y]b`6Ygi W`XYg`GW`c`ggYg`j`cb`; Ya ØbXYb`Y]b
A i gg``8]YgYg`]a`F`YbU]ggUbW`!Gh`]YfVUi hY`GW`c`gg`V]YhYh`Y]bY
VYnUi VYfbXY`?i`]ggY`i`bX`]gh`j`cb`k`i`bXYfgW`ØbYb`; ÅfhYb
i`a`[YVYb``8]Y`?ca`V]bUh]cb`Ui`g`5fW`hY`_hi`f`i`bX`BUhi`f`a`UW`h`Yg
ni`Y]bYa`]XYU`Yb`C`fh`ZØf`Yb`hgd`UbbYbXY`GdUn]Yf[Åb[Y`i`bX`Y]bY
_`Y]bY`5i`gnY]hij`ca`\\Y`_h]gW`Yb`5``hU["

9]b`VYgcbXYfYg`<][`\\[`h`]gh`XUg`GW`c`gg`8`\\Ui`bž`XUg`Ui`ZY]bYa
ghY`]Yb`<Ub[`[YVUi`h`k`i`fXY`i`bX`Y]bY`VYY]bXfi`W_YbXY`5i`gg]W`h
Ui`ZX]Y`i`a`]Y[YbXY`@UbXgW`UZh`V]YhYh``8]YgYg`6Ui`k`Yf`_`\\Uh`Y]bY
VYk`Y[hY`; YgW`]W`hY`ž`X]Y`V]g`]bg`%&``\f\i`bXYfh`ni`fØW`_fY]W`h`
BcW`\\Yi`hY`_Ubb`a`Ub`X]Y`, VYffYghY`XYf`U`hYb`A`Ui`Yfb
VYg]W`h][Yb`i`bX`a`Y`f`ØVYf`X]Y`; YgW`]W`hYb`YfZU`fYbž`X]Y`X]YgY
A`Ui`Yfb`Yfn`Å`\\Yb`_ØbbhYb"

HUVY``YbØVYfg]W`h`XYf`6i`f[Yb`i`bX`GW`c`ØggYf`]a
F`\\Y]b!<i`bgfØW`!`?`fY]g

B Ua Y

GhUbXcfh

9fvUi i b[gU\ f

6YgcbXYf\Y]hY

b

6i f['GhU\`YW_	6UWUfUW	%&" ɔ\ f\ i bXYfh	ɔ [YbX\YfVYf[Yž 5i gg]W hgd i b_h
6i f['H\i fUbh	5`_Yb	%%" ɔ\ f\ i bXYfh	GW ÖbY`HØfa Yž : Ø\ fi b[Yb
6i f[`?i Yg	6Yfb_UghY`! ?i Yg	%(" " ɔ\ f\ i bXYfh	@Y[YbXYbž`?Y` YfVYg]W h][i b[Yb
GW `cgg ; Ya ØbXYb	; Ya ØbXYb	%* " ɔ\ f\ i bXYfh	F YbU]ggUbW! 5fW]hY`_hi fž ; ÅfhYb
GW `cgg`8\Ui b	8\Ui b	%&" ɔ\ f\ i bXYfh	6YY]bXfi W_YbX Y`5i gV`]W_Y

8]Y`6i f[Yb`i bX`GW`ÖggYf`]a`F\Y]b!<i bgfØW_!`?fY]g`g]bX`b]W h
bi f`_ VYffYghY`j Yf[Ub[YbYf`NY]hYbž`g]Y`g]bX`Ui W`YVYbX][Y
; YgW]W hgyfnÅ\`Yf" `ΔfY`A Ui Yfb`nYi [Yb`j cb`j]Y`Yb
ɔ\ f\ i bXYfhYb`XYg`@YVYbgž`XYf`?f]Y[Y`i bX`XYf`?i`hi f" `J]Y`Y
X]YgYf`\]ghcf]gWYb`CfhY`V]YhYb`Ui W`J YfUbghU`hi b [Yb`Ubž`X]Y
X]Y`HfUX]h]cbYb`i bX`6fÅi W`Y`XYf`XUa`U][Yb`NY]h`YVYbX][
k YfXYb`"UggYb"

9]b`6Ygi W`X]YgYf`CfhY`V]YhYh`b]W h`bi f`Y]bY`F Y]gY`]b`X]Y
J Yf[Ub[Yb\Y]hž`gcbXYfb`Ui W`X]Y`A Ö[`]W`_Y]hž`a Y\ f`ØVYf`X]Y
_i`hi fY`Yb`K i fnY`b`XYf`F Y[]cb`ni`YfZU\ fYb" `K UbXYfi b[Yb`Ui Z
XYb`a`U`Yf]gWYb`K Y[Yb`fi bX`i`a`X]Y`6i f[Yb`j`Yfh]YZYb`XUg
9f`YVb]g]i bX`Yfa`Ö[`]W`Yb`Y]bYb`6`]W`_Ui Z`X]Y`VY Y]bXfi W`_YbXYb
@UbXgW`UZhYbž`X]Y`X]YgY`\]ghcf]gW`k`]W h][Yb`GhÅhYb`i`a [YVYb"
Bi`hYb`G]Y`X]Y`; Y`Y[Yb\Y]hž`X]Y`; YgW]W hY`X]YgYf
ZUgn]b]YfYbXYb`F Y[]cb`a`]hY][YbYb`5i [Yb`ni`gY\Yb`i bX`X]Y
; YgW]W hYb`XYf`J Yf[Ub[Yb\Y]h`ni`Yf`YVYb"

? i `]bUf]gW`Y` ; YbØggY. `F YghUi fUbh! H]d dg
i bX`c`_U`Y`GdYn]U`]hÅhYb

æ`F\Y]b!<i bgfØW_!`?fY]g`k]fX`XYf` ; Ui`a`Yb`j`Yfk`Ö\bh`8]YgY

F Y []cb`]ghVYfØ\`a h`ZØf`]\fY`_i`]\bUf]gWYb`GWÅhnYž`X]Y`j`cb
 \Yfn\UZhYb` ; Yf]W hYb`V]g`\]b`ni`gØ»Yb`@YW_YfY]Yb`fY]WYb`" <]Yf
 g]bX`Y]b][Y`9a`dZY`\`i`b[Ybž`X]Y`G]Y`Ui`Z`Δ`fYf`_i`]\bUf]gWYb
 9bhXYW_i`b[gfY]gY`Xi`fW`X]YgY`a`U`Yf]gWY` ; Y[YbX`b]W h
 j`YfdUggYb`gc`hYb"

Hmd]gWY` ; Yf]W hY`XYf`F Y []cb

- < i b g f Ø W _ Y f ` G U i ` a ` U [Y b . ` 9] b Y ` G d Y n] U `] h Å h ž ` X] Y ` G] Y
 d f c V] Y f Y b ` a ` Ø g g Y b ` ° ` 8] Y g Y ` \ Y f n \ U Z h Y ` K ` i ` f g h ` k `] f X ` U i ` g
 G W Å k Y] b Y Z Y] g W Å ž ` ? U f h c Z Z Y ` b ` i ` b X ` ; Y k ` Ø f n Y b ` n i ` V Y f Y] h Y h ` i ` b X
] b ` Y] b Y a ` ` G W Å k Y] b Y a ` U [Y b ` [Y [U f h ` ° ` 5 a ` ` V Y g h Y b ` g Y f j `] Y f h ` a `] h
 G U i ` Y f ` _ f U i ` h ` i ` b X ` G Y b Z "
- F Y \ ` c X Y f ` K `] ` X g W Å k Y] b . ` K `] ` X [Y f] W h Y ` g] b X `] b ` X] Y g Y f
 k ` U ` X f Y] W Y b ` F Y [] c b ` g Y \ ` f ` V Y `] Y V h ` ° ` C ` Z h ` k ` Y f X Y b ` g] Y ` a `] h
 \ U i ` g [Y a ` U W Å h Y b ` 6 Y] U [Y b ` k `] Y ` ? b Ø X Y ` b ` i ` b X ` D `] n Y b
 g Y f j `] Y f h "
- F \ Y] b] g W Å Y f ` G U i ` Y f V f U h Y b . ` 9] b ` k ` Y] h Y f Y g ` <] [\ `] [\ h `] g h
 X Y f ` G U i ` Y f V f U h Y b ž ` X Y f ` h f U X] h] c b Y ` ° ` U i ` g ` F `] b X Z Y] g W Å
 n i ` V Y f Y] h Y h ` k `] f X ` i ` b X ` Ø V Y f ` a ` Y \ f Y f Y ` H U [Y ` a ` U f] b] Y f h ` k `] f X ž
 i ` a ` X Y b ` j ` c ` ° ` Y b ` ; Y g W Å a ` U W _ ` n i ` Y b h Z U ` h Y b "

9a`dZY`\`Yb`gk`YfhY`F`YghUi`fUbhg

K`Ybb`G]Y`bUWÅ`Y]bYf`hc`°`Yb`F`YghUi`fUbh!`9a`dZY`\`i`b[`gi`WYbž
 gWÅ`Ui`Yb`G]Y`g]WÅ`X]YgY`C`fhY`Ubž`X]Y`ZØf`]\fY`\Yfj`c`ffU[`YbXY
 ?`ØWÅ`Y`VY`_`Ubbhg]bX.

F Y g h U i f U b h	C f h	6 Y g c b X Y f \ Y] h Y b
K`U`X[`Ugh\`Ui`g 6i`WYb`c`WÅ	6i`WYb`c`WÅ	F`Y[`]cb`U`Y K`]X[`Yf]`W h`Y
K`Y]b`\`Ui`g`DYfg]i`g	F`ØXYg`\Y]a	5i`g[`YnY]`WÅ`b`Y`h`Y K`Y]b`U`i`g`k`U`\`
<`chY`!`F`YghUi`f`Ubh Gcbh\Y]a`Yf	;`Ya`Øb`XYb	<`i`b`g`f`Ø`W`_`Y`f G`d`Y`n`]`U`°`]`h`Å`h`Y`b

GØ»`Y`J`Yf`gi`WÅ`i`b[`Y`b

≠`X]YgYf`FY[]cb`Z]bXYb`G]Y`b]W`h`bi`f`\Yfn\UZhY`GdY]gYbž`gcbXYfb
Ui`W`Y]b][`Y`gØ»Y`@YW_YFY]Ybž`X]Y`Yg`k`Yfh]g]bXž`dfcV]Yfh`ni
k`YfXYb.

- GhfYi`gY`_i`W`Yb.`9]b`?`Ugg]_Yfž`XYf`]b`j`]Y`Yb`7UZÅg
Ub[`YVchYb`k`]fX`"DfcV]YFYb`G]Y`]\b`a`]h]Zf]gW`Yb`Y`dZY`b
cXYf`Nk`YhgW`[`Yb`°
- <`i`b`gfØW_Yf`5dZY`k`Y]b.`8]YgY`gdf]hn][`Y`?`Øgh]W`_Y]h
k`]fX`cZ]b`_Y]bYb`6fUi`YfY]Yb`i`bX`K`Y]b[`ØhYfb`XYf
FY[]cb`\Yf[`YghY`"h"
- DZÅ`nYf`HcV`YfcbY.`9]bY`_fYUh]j`i`a`[`Yk`UbXY`hY
BUW`gdY]gYž`X]Y`G]Y`]b`j`YfgW`]YXYbYb`c`_U`Yb
?`cbX]hcFY]Yb`Z]bXYb`k`YfXYb`"9]b`A`i`gg`ZØf
GW`c`c`UXYb`]YV\UVYf`°

@c`_U`Y`A`Åf`_hY`i`bX`:`YghY

9]b`k`Y]hYfYf`[`fc»Yf`;`Ybi`gg`ZØf`X]Y`G]bbY`g]bX`X]Y`c`_U`Yb`A`Åf`_hY
i`bX`:`YghYž`Ui`ZXYbYb`G]Y`_Øgh]W`Y`fY[]cbU`Y`DfcXi`_hY`Yf`YVYb
_ØbbYb`"J]Y`Y`_Y]bY`8`ØfZYf`ZY]Yfb`fY[`Y`a`Å»][`ž`k`c`G]Y`c`_U`Y
?`ÅgYgc`fhYbž`K`i`fghk`UfYb`i`bX`Zf]gW`[`YVUW_YbYg`6fch`dfcV]YfYb
ØbbYb`"8Yf`F`Y]b!<`i`b`gfØW!`?`fY]g`V]YhYh`nU`fY]W`Y
A`Ø[`]W`_Y]hYbž`X]Y`c`_U`Y`?`i`hi`f`Xi`fW`]\`fY`?`ØW`Yb`ni`Yb`hXYW_Yb
`j`cb`9fb`hYXUb`_ZYghYb`V]g`\]b`ni`K`Y]\bUW`hga`Åf`_hYb`"

8Yf`K`c`W`Yb`a`Uf`_h`]b`6UX`GU`n][`]gh`VYgcbXYfg`VY`]YVhž
k`Å`fYbX`X]Y`F`ØXYg`Y]a`Yf`K`Y]b`k`c`W`Y`Y]b`<][`\][`\h`ZØf
K`Y]b`]YV\UVYf`]gh`<]Yf`_ØbbYb`G]Y`X]Y`i`bhYfgW`]YX`]W`Yb`K`Y]bY
dfcV]YfYb`i`bX`X]Y`_i`_]bUf]gW`Yb`GdYn]U`]h`hYb`XYf`FY[]cb
[`Yb]Y»Yb`"

8Yb`_Yb`G]Y`XUfUbž`XUgg`j`]Y`Y`FYghUi`fUbhg`i`bX`7UZÅg`]b`XYf
FY[]cb`ghYhg`XUfUi`ZVYXUW`h]g]bXž`Ni`hUhYb`Ui`g`XYf`I`a`[`YVi`b[`ni
j`Yfk`YbXYb`"8]Yg`VYXYi`hYhž`XUgg`G]Y`X]Y`:`f]gW`Y`i`bX`E`i`U`]h`h`XYf
;`Yf]W`hY`gW`Å`hYb`_ØbbYbž`k`Å`fYbX`G]Y`Y]bYb`6Y]hfU[`ni`f
I`bhYfghØ`mi`b[`XYf`c`_U`Yb`K`]fhgW`UZh`Y]ghYb`"

CV`G]Y`bi`b`]b`Y]bYa`ZY]bYb`FYghUi`fUbh`gdY]gYb`c`XYf`Ub`Y]bYa

Y]bYb`GhfU»YbghUbX`Y]bYb`GbUW[Yb]Y»Ybž`XYf`F`Y]b!<i bgfØW!
?fY]g`k`j]fX`ΔbYb`a`]h`G]W`Yf`Y]h`_i`_`]bUf]gW`Y`9f]bbYfi b[Yb
VYgW`YfYbž`X]Y`G]Y`b]W`h`gc`gW`bY`j`Yf[YggYb`k`YfXYb"@UggYb
G]Y`g]W`VY]`ΔfYf`F`Y]gY`j`cb`XYf`J]Y`ZU`h`XYf`5b[YVchY
ØVYffUgW`Yb`i`bX`Yb`h`XYW`Yb`G]Yž`k`Ug`X]YgY`k`i`bXYfgW`ØbY
FY[]cb`U`Yg`ni`V]YhYb`U`h`

5_h]j Y` : fY]nY]h[YghU`hi b[.`K UbXYf!`i bX F UXk Y[Y`]a` <i bgfØW_

8Yf`F`Y]b!<i bgfØW_!`fY]gž`a`]h`gY]bYf`UhYa VYfUi VYbXYb
@UbXgW`UZh`i`bX`XYf`i`bVYfØ`fhYb`BUhi fž`V]YhYh`Y]bY` : Ø`Y`j`cb
A`Ø[`]W`_Y]hYb`ZØf`U_h]j Y` : fY]nY]h[YghU`hi b["8]Y`gUbZhYb`<Ø[Y`ž
X]W`hYb`K`À`XYf`i`bX`a`U`Yf]gW`Yb`K`Y]bhYffUggYb`UXYb`XUni`Y]bž
X]Y`FY[]cb`ni` :`i`»`cXYf`Ui`ZXYa` :`U`ffUX`ni`Yf`_i`bXYb"<]Yf`g]bX
Y]b][Y`XYf`VYghYb`K`UbXYffci`hYb`i`bX`F`UXk`Y[Yž`X]Y`Xi`b]W`h
j`YfdUggYb`gc`hYgh"

K UbXYfk Y[Y`]a` <i bgfØW_

K`Ybb`Xi`X]Y`bUhØf`]W`Y`G`W`Øb`Y]h`XYg`<i bgfØW_g`Yf`VYb
a`ØW`hYghž`g]bX`X]Y`K`UbXYfk`Y[Y`XYf`F`Y[]cb`dYfZY`_h[]Y][]bYh"
8]Y`k`Y`][Y`@UbXgW`UZh`i`bX`X]Y`gW`Uhh][Yb`K`À`XYf`V]YhYb`]XYU`Y
6YX]b[i`b[Yb`ZØf`K`UbXYfYf`U`Yf`G`W`k`Y]f][_Y]hg[fUXY"<]Yf`g]bX
Y]b`dUUf`YfUi`gfU[YbXY`K`UbXYfk`Y[Y`.

- <i bgfØW_!< Ø`Yb`k`Y[.`8]YgYf` : Yfbk UbXYfk Y[`YfghfYW_h
g]W`ØVYf`Yhk`U`&&\$`?]`ca`YhYf`i`bX`ZØ`fh`Xi`fW`X]Y
[YgUa`hY`F`Y[]cb`"8]Y`F`ci`hY`V]YhYh`gdY`_hU`_i`ÀfY
5i`gg]W`hYb`i`bX`j`Yf`Ài`Zh`Xi`fW`i`bVYfØ`fhY`BUhi`fž
`]ghcf]gW`Y`8`ØfZYf`i`bX`VY]bXfi`W`YbXY`6i`f[Yb"
- F`Y]b`6i`f[Yb`K`Y[.`9f`j`YfV]bXYh`X]Y`6i`f[Yb`Yb`h`Ub[`XYg
F`Y]bg`i`bX`YfghfYW_h]g]W`ØVYf`&\$\$`?]`ca`YhYf`"8]Y
K`UbXYfYf`_Øb`Yb`g]W`U`i`Z`hfUi`a`UZhY`5i`gV`]W`Y`Ui`ZXYb
F`Y]b`i`bX`ZYggY`bXY`?`i`hi`fgh`hYb`ZfYi`Yb"
- HfUi`a`gW`Y]ZYb.`8]YgY`%(`F`i`bXY`!`K`UbXYfi`b[Yb`]a
<i bgfØW_g]bX`bUW`VYgcbXYfYb`H`Y`a`Yb`[YghU`hYh`"»XY
HfUi`a`gW`Y]ZY`V]YhYh`Y]bn][Ufh][Y`9f`YVb]ggYž`j`cb

DUbcfUa UUi gg]W hYb`V]g` \]b`ni` VchUb]gW Yb
9bhXYW_i b[Yb"

F UXk Y[Y`]a` <i bgfØW_

: Øf`F UXZU\ fYf` \Uh`XYf`F \Y]b!<i bgfØW_! ? fY]g`YVYbgc`Y]bY`J]Y`nU\`
j cb`[i h`Ui g[YVUi hYb`F UXk Y[Yb`ni` V]YhYb`"C V`Xi` [Ya` Øh`]W
Xi fW`X]Y`K Y]bVYf[Y`fUXY`b`cXYf` \YfUi gZcfXYfbXY`A ci bhU]bV]_Y!
GhfYW_Yb`Yf`_i bXYb`a` ØW hYghž`X]Y`F Y[]cb` \Uh`Yhk Ug`ZØf`YXYb
; YgW`a` UW_.

- <i bgfØW_!F UXk Y[.`5i ZX]YgYf`Yhk U`%&\$`?]`ca` YhYf`
`Ub[Yb`GhfYW_Y`Yf`YVgh`Xi`X]Y`]Xm`]gW`Y`@UbXgW`UZh`i bX`
X]Y`i bVYfØ`fhY`BUhi`f`XYf`F Y[]cb`"8Yf`K Y[`ZØ\fh`Xi`fW`
W`Ufa` UbhY`8`ØfZYf`i bX`V]YhYhinU\`fY]W`Y`
F Ugha` Ø[`]W`_Y]hYb"
- F \Y]b`fUXk Y[.`5Vk YW`g`i b[gfY]W`i bX`gdY`_hU`_i`Àf`
ZØ\fh`X]YgYf`F UXk Y[`Yb`h`Ub[`XYg`F \Y]bg`"A`]h`
UhYa` VYfUi` VYbXYb`5i`gV`]W_Yb`Ui`Z`X]Y`K Y]bYf[]cb`i bX`
6i`f[Yb`]gh`Yf`Y]b`A`i`gg`ZØf`YXYb`F UXZU\ fYf"
- 9]ZY`!<i bgfØW_!F UXk Y[.`8]YgY`Hci`f`Y][`bYh`g]W`ZØf`
Yhk Ug`YfZU\ fYbYfY`F UXZU\ fYfž`X]Y`X]Y`<YfUi`gZcfXYfi`b[
`]YVYb`"8Yf`F UXk Y[`j`YfV]bXYh`X]Y`VY]XYb`F Y[]cbYb`i bX`
V]YhYhinU\`fY]W`Y`<Ø`Yb!`i bX`H]YZYbi`bhYfgW`]YXY"

K UbXYf!`i bX`F UXhci`fYb`ZØf`X]Y`[Ub`nY`:`Ua`]`Y

8]Y`J]Y`ZU`h`XYf`A`Ø[`]W`_Y]hYb`]a`<i bgfØW_`a` UW`h`Yg`Y]bZUW`ž`
Y]bY`dUggYbXY`Hci`f`ZØf`X]Y`[Ub`nY`:`Ua`]]Y`ni`Z]bXYb`"J]Y`Y`XYf`
K UbXYf!`i bX`F UXk Y[Y`g]bX`ni`XYa` `_]bXYfZfYi`bX`]W`i`bX`V]YhYb`
gdUbbYbXY`BUhi`fYf`YVb]ggY`gck`]Y`Y`ffY]W`Y`#Zcfa`Uh]cbYb"

5_h]j`]h`Àh`	;`YY][`bYhY`GhfYW_Y`	6YgcbXYf\Y]hYb`
K UbXYfb`	<i bgfØW_!<Ø`Ybk`Y[`	GdYW`hUW` `Uf`j`]Yk`g` UbX`\]ghcf]W` j`]`U[`Yg`
F UXZU\ fYb`	<i bgfØW_!F UXk Y[`	K Y`"!g][`bdcghYXž` ZUa`]`m!Zf]YbX`m`

5_hlj]hÀh	; YY][bYhY`GhfYW_Y	6YgcbXYf\Y]hYb
: Ua]]YbUi gZi [HfUi a gW`Y]ZYb	≠hYfUWh]j Y`bUhi fY hfU]`g`UbX`d`Um`UfYUg

H]ddg`ZØf`K UbXYfYf`i bX`F UXZU\ fYf

I a`XY]b`5VYbhYi Yf`a`F\Y]b!<i bgfØW_!`? fY]g`i bj Yf[Ygg`]W`ni
a UWXYbž`\UVYb`k]f`\]Yf`Y]b][Y`bØh`]WXY`H]ddg
ni gUa a Yb[YghY`h

- F]W h][Y`5i gfØghi b[.`GhY`Y`g]WXYfž`XUgg`Xi`VYei Ya Y
K UbXYfgW`i \Y`cXYf`Y]b`[i hYg`: U\ffUX`\Ughž`Y`bUWXYa ž
k Y`WY`5_hlj]hÀh`Xi`k`À`gh`"9g`]gh`Ui W`fUhgUa žY]bY
FY[Yb`UW_Y`i bX`Ui gfY]WXYbX`K UggYf`a]hni bY`a Yb"
- ? UfhYb`i bX`5ddg. Bi hmY`K UbXYf!5ddg`cXYf`? UfhYbž`i a
X]W`ni fYW`hni Z]bXYb`"J]Y`Y`K UbXYfk Y[Y`g]bX`[i h
Ui g[YgW`]`XYfhž`UVYf`Yg`gW`UXYh`b]Yž`Y]bY`? UfhY`ni f`< UbX
ni`\UVYb"
- DUi gYb`Y]bd`UbYb. D`UbY`Ui gfY]WXYbX`DUi gYb`Y]bž`i a
X]Y`BUhi f`ni`[Yb]Y»Yb`cXYf`]b`Y]bYa`XYf`_Y]bYb`7UZÅg
cXYf`F YghUi fUbhg`]b`XYf`FY []cb`ni`j Yfk Y]`Yb"
- GY\Yb`gk ØfX][_Y]hYb`VYfØW_g]W h][Yb. ?ca V]b]YfY
XY]bY`K UbXYf!`cXYf`F UXhci f`a]h`Y]bYa`6Ygi W`XYf
fY[]cb`U`Yb`GY\Yb`gk ØfX][_Y]hYb`cXYf`6i f[Ybž`i a`XUg
9f`YVb]g`ni`VYfY]WXYfb"

A]h`gY]bYb`j]Y`ZÀ`h][Yb`K UbXYf!`i bX`F UXk Y[Yb`ÀXh`XYf`F`Y]b!
<i bgfØW_!`? fY]g`XUni`Y]bž`U_hlj`ni`gY]b`i bX`X]Y`UhYa`VYfUi`VYbXY
BUhi f`]bhYbg]j`ni`Yf`YVYb`"CV`U`Y]bYž`a]h`: fYi bXYb`cXYf`]b`XYf
: Ua]]Y`]\]Yf`Z]bXYh`YXYf`XUg`d`UggYbXY`5VYbhYi Yf`]ba]hYb`XYf
a`U`Yf]gW`Yb`@UbXgW`UZh"

J YfUbghU`hi b[Yb`i bX`:`YghY. 8 Ug`_i`hi fY`Y
9fVY`Yf`YVYb

8 Yf`F`Y]b!<i bgfØW_!`? fY]g`]gh`b]W`h`bi f`ZØf`gY]bY
UhYa`VYfUi`VYbXY`BUhi f`i bX`\]ghcf]gW`Yb`GY\Yb`gk ØfX][_Y]hYb
VY`Ub`bž`gcbXYfb`Ui W`ZØf`Y]b`fY]W`\U`h][Yg`_i`hi fY`Yg`9fVYž`XUg

g]W\`]b`Y]bYf`J]Y`nU\`j`c b`J YfUbgH`hi b[Yb`i bX` : YghYb
k]XYfgd]Y[Y`h`8]YgY`9j Ybhg`g]bX`Y]b`]XYU`Yf`5b`Uggž`i a`X]Y
HfUX]h]cbYb`i bX`XUg` ; Ya Y]bgW`UZh[YZØ\`XYf`FY []cb`\Ui hbU\`ni
Yf`YVYb"

C V`GhUXhZY ghYž`fY []cbU`Y`A Āf`hY`cXYf`gdYn]Y`Y`_i`hi fY`Y
J YfUbgH`hi b[Ybž`XYf`F`Y]b!< i bgfØW`!`? fY]g`\Uh`XUg`[Ubny`š\`f
ØVYf`Yhk Ug`ni`V]YhYb" <]Yf`g]bX`Y]b][Y`XYf`\YfUi`gfU[YbXghYb
: YghYž`X]Y`G]Y`b]W`hj YfdUggYb`gc`hYb.

- < i bgfØW`Yf`K Y]ba Uf`h`9]b`<][\`][\h`ZØf
K Y]b`]YV\UVYfž`XYf`YXYg`š\`f]b`j YfgW`]YXYbYb`Gh`XhYb
ghUhh]bXYh`i bX`A`bYb`X]Y` ; Y`Y[Yb`Y]h`[]Vhž
Ui`g[YnY]W`bYhY`K Y]bY`Ui`g`XYf`FY []cb`ni`j`Yf`cghYb"
- K U`X!`i bX`K]YgYbZYgh`9]b` : Ua`j]YbZYghž`XUg`X]Y`BUhi`f
i bX`X]Y`ĀbX`]W`Y`?i`hi`f`ZY]Yfž`]b`_i`g]j`Y`j`YfgW`]YXYbYb
5`_h]j]h`hYb`i bX`_i`]bUf]gW`Yb`5b[YV`chYb"
- <]ghc`f]gW`Yg`GhUXhZYgh`]b`G]a`a`Yfb`8]YgY
J YfUbgH`hi b[`i`a`ZUggh`nU\`fY]W`Y`5i`ZZØ\`fi`b[Ybž`A`Āf`hY
i bX`K`cf`g\`cdgž`X]Y`XUg`a`]hY`U`hYf`]W`Y`9fVY`XYf`GhUXh
k]XYfgd]Y[Y`b"

9]b`VYgcbXYfg`Y]bXfi`W`gj`c`Yg`9j`Ybh`]gh`XUg`< i bgfØW`Yf
HfUW`hYbZYghž`XUg`U`Y`nk`Y]`š\`fY`ghUhh]bXYh" <]Yf`d`f`ĀgYbh]YfYb
HfUW`hYb[fi`d`dYb`Ui`g`XYf`FY []cb`]fY`k`i`bXYfgW`ØbYbž
hfUX]h]cbY`Y`[YZYfh][hYb`HfUW`hYb"8]Y`J`YfUbgH`hi b[`ZØfXYfh`b]W`h
bi`f`X]Y`c`_U`Y`?i`hi`fž`gcbXYfb`Vf]b[h`Ui`W`A`YbgW`Yb`Ui`g
j`YfgW`]YXYbYb` ; Ya Y]bXYb`ni`gUa`a`Ybž`i`a`]\`fY` ; Ya Y]bgW`UZh`ni
ZY]Yfb"

J YfUbgH`hi b[C`fh A`cbUh 6YgcbXYf`Y]hY
b

< i bgfØW`Yf K Y]ba Uf`h	6Yfb`_UghY`! ?i`Yg	GYdhYa`VYf	K Y]bj`Yf`cghi`b [Ybž`@]j`Y! A`i`g]_
K U`X!`i bX K]YgYbZYgh	6UX GcVYfb`\Y]a	š`b]	: Ua`j]YbU`_h]j]h ĀhYbž`fY []cbU`Y ?ØW`Y

J YfUbgHU`hi b[C fh A cbUh 6YgcbXYf\Y]hY

<]ghcf]gW\Yg GhUXhZYgh	G]a a Yfb	5i [i gh	b A]hY`U`hYfa Uf_ hž< UbXk Yf_gj cfZØ\fi b[Yb
< i bgfØW_Yf HfUW\hYbZYgh	F \Y]bVÖ`Yb	ž `]	HfUW\hYbdUfUX Yž`HUbni cfZØ\f i b[Yb

9]b`k Y]hYfYf`< Ò\Ydi b_h]g]bX`X]Y`K Y]\ b UW\ hga Äf_hYž`X]Y`]b
j]Y`Yb`GhÄXhYb`i bX`8 ÒfZYfb`]a `F \Y]b!< i bgfØW_!`? fY]g
gh]a a i b[gj c``Ui g[YhfU[Yb`k YfXYb``<]Yf`_ÖbbYb`G]Y`c_U`Y
< UbXk Yf_g_i bgh`VYk i bXYfbž`_Ögh]W\Y`@YW_YfY]Yb`[Yb]Y»Yb`i bX
X]Y`ZYgh]W\Y`5ha cgd\ÄfY`VY]; `Ø\k Y]b`i bX`6fUhk ØfghYb`Yf`YVYb"
6YgcbXYfg`X]Y`A Äf_hY`]b`?]fW\VYf[`i bX`6cddUfX`n]Y\Yb
nU\`fY]W\Y`6Ygi W\Yf`Ub`i bX`V]YhYb`Y]b`i bj Yf[Ygg`]W\Yg`9f`YVb]g"

< Yfj cfni \YVYb`]gh`Ui W\`XUg`< i bgfØW_Yf`: c`_`cfY!: Ygh]j U`ž
XUg`A i g]_[fi ddYb`Ui g`XYf`[UbnYb`K Y`h`ni gUa a YbVf]b[hi bX
ni [`Y]W\`c_U`Y`? Øbgh`Yf`i bhYfghØhnh`<]Yf`_ÖbbYb`G]Y`X]Y`J]Y`ZU`h
XYf`: c`_`cfY`i bX`j YfgW\]YXYbY`A i g]_gh]`Y`Yf`YVYbž`j cb
hfUX]h]cbY`Yb`< i bgfØW_Yf`A Y`cX]Yb`V]g`\]b`ni `a cXYfbYb
`bhYfdYhUh]cbYb"

: Øf`; YgW\]W\hg]bhYfYgg]YfhY`V]YhYb`X]Y`HU[`XYf`c ZZYbYb`HØf
!J YfUbgHU`hi b[Yb`]b`XYb`nU\`fY]W\Yb`6i f[Yb`i bX`GW\`ÖggYfb`XYf
FY[]cb`Y]bY`Y]ba U`][Y`; Y`Y[Yb\Y]hž`a Y\`f`ØVYf`X]Y`; YgW\]W\hY
XYg`F \Y]b!< i bgfØW_!`? fY]gYg`ni `YfZU\`fYb``C Zh`k YfXYb`: Ø\fi b[Ybž
\]ghcf]gW\Y`8 UfghY``i b[Yb`i bX`K cf_g\cdg`Ub[YVchYbž`X]Y`XYb
6Ygi W\Yfb`Y]bYb`gdUbbYbXYb`9]bV`]W_]b`j Yf[Ub[YbY`NY]hYb
[YVYb"

K Ybb`G]Y`X]Y`?i`hi`f`i bX`X]Y`A YbgW\Yb`XYf`FY[]cb`bcW\`VYggYf
_YbbYb`YfbYb`a ÖW\hYbž`gc`hYb`G]Y`XYb`?i`hi`fk`Ub`XYfk`Y[]b
XYf`BÄ\Y`j`cb`Gh``; cUfg\Ui`gYb`b]W\h`Ui`g`UggYbž`XYf`Xi`fW\`X]Y
`UbXgW\UZh]W\`fY]nj`c``Y`l`a [YVi`b[`ZØ\fh`i bX`Ä`bYb`[`Y]W\`nY]h][
9]bV`]W_]b`c_U`Y`HfUX]h]cbYb`i bX`6fÄi`W\Y`[]Vh"

I a 'XUg'_i`hi fY`Y`9fVY`XYg`F`Y]b!<i bgfØW_!`fY]gYg`k`]f`_]W`ni
Yf`YVYbž`]gh`Yg`k`]W`h][`ž`g]W`ØVYf`c`_U`Y`:`Ygh`Y`i`bX
J`Yf`Ubgh`U`hi`b`[`Yb`ni`i`]b`Zc`fa`]Yf`Yb`i`b`X`Y`b`HY`]'`XYf`Y`VYb`X][`Yb
;`Ya`Y`]bg`W`U`Z`h`i`k`Yf`XYb`"9[`U`ž`c`V`G]Y`Y`b`Y`]ba`U`][`Yg`9j`Ybh
VYgi`W`Yb`c`XYf`X]Y`c`_U`Y`?i`hi`f`k`À`f`Yb`X`≠`f`Yg`5i`Z`Yb`h`U`hg
_Ybb`Yb`Yfb`Yb`a`Ø`W`h`Yb`ž`X]Y`F`Y`[`]cb`V`Y`h`Y`h`≠`b`Yb`i`bn`À`][`Y
A`Ø`[`_]W`_Y]h`Yb`ž`i`b`j`Yf`[`Ygg`]W`Y`9f`]bb`Yfi`b`[`Yb`ni`i`g`W`U`Z`Yb`"

: Øf`k`Y`]h`Yf`Y`≠`Zc`fa`U`h][`cb`Yb`ni`i`J`Yf`Ubgh`U`hi`b`[`Yb`i`b`X`:`Ygh`Yb`]a
F`Y`]b!<i bgfØW_!`fY]g`VYgi`W`Yb`G]Y`X]Y`c`Z]n]Y`Y`K`YVg]h`Y`f`Y]b!
\`i`bgfi`YW`!`_fY]g`"XY"

;`Y`Y`]a`h][`d`d`g`ZØf`j`Y`f`gh`Y`W`_`h`Y`G`W`À`h`n`Y`.

5i`g`Z`i`[`gn]Y`Y`UV`g`Y]hg`X`Y`f`H`c`i`f`]gh`Y`b`d`Z`U`X`Y`

8`Y`f`F`Y`]b!<i bgfØW_!`fY]g`]gh`b]W`h`b`i`f`ZØf`g`Y]b`Y
U`h`Y`a`V`Y`f`U`i`V`Y`b`X`Y`B`U`h`i`f`i`b`X`f`Y]W`Y`b`:`Y`g`W`]W`h`Y`V`Y`_`U`b`b`ž
g`c`b`X`Y`f`b`U`i`W`ZØf`g`Y]b`Y`n`U`f`Y]W`Y`b`j`Y`f`gh`Y`W`_`h`Y`b`G`W`À`h`n`Y`ž`X]Y`Y`g
ni`Y`b`h`X`Y`W`_`Y`b`i`[`]h`"5`V`g`Y]hg`X`Y`f`[`À`b`[`][`Y`b`H`c`i`f`]gh`Y`b`d`Z`U`X`Y`i`[`]V`h`Y`g
Y]b][`Y`C`f`h`Y`ž`X]Y`k`Y`b][`Y`f`V`Y`gi`W`h`ž`U`V`Y`f`b]W`h`k`Y`b][`Y`f
V`Y`Y]b`X`fi`W`_`Y`b`X`g]b`X`"<]Y`f`g]b`X`Y]b][`Y`Y`W`h`Y`:`Y`Y`]a`h][`d`d`g`ž`X]Y`g]W`
`c`\`b`Y`b`ž`V`Y`gi`W`h`i`ni`k`Y`f`X`Y`b`.

- 8`Y`f`G`W`]b`X`Y`f`\`U`b`b`Y`g`f`U`X`k`Y`[`.9]b`a`U`Y`f]g`W`Y`f`F`U`X`k`Y`[
Ø`V`Y`f`i`'`?`]c`a`Y`h`Y`f`ž`X`Y`f`j`c`b`9`a`a`Y`g`\`U`i`g`Y`b`b`U`W`i`6`c`d`d`U`f`X
ZØ\`f`h`"8]Y`G`h`f`Y`W`_`Y`g`W`_`À`b`[`Y`h`g]W`X`i`f`W`_`Y]b`Y`8`Ø`f`Z`Y`f`i`b`X
j`c`f`V`Y]`U`b`k`i`b`X`Y`f`g`W`Ø`b`Y`b`5i`gg]W`h`g`d`i`b`_`h`Y`b`"
- 8`Y`f`C`f`h`?`U`d`d`Y`".9]b`k`]bn][`Y`g`ž`W`U`f`a`U`b`h`Y`g`8`c`f`Z`a`]h
h`f`U`X]h][`c`b`Y`Y`f`5`f`W`]h`Y`_`h`i`f`i`b`X`Y`b]Y`f`\`Y`f`f`]W`Y`b`5i`gg]W`h
U`i`Z`X]Y`i`a`]Y`[`Y`b`X`Y`b`K`Y]b`V`Y`f`[`Y`"<]Y`f`[`]V`h`Y`g`Y]b`Y
U`i`h`Y`b`h]g`W`Y`5`h`a`c`g`d`\`À`f`Y`ž`X]Y`Y]b`Y`b`6`Y`gi`W`k`Y`f`h`]gh`"
- 8]Y`A`]h`h`Y`U`h`Y`f`]W`Y`G`h`U`X`h`:`Y`b`[`Y`b`V`U`W`_`5i`W`k`Y`b`b
g]Y`b]W`h`X]f`Y`_`h`]a`i`<i bgfØW_`]Y`[`h`ž`]gh`X]Y`W`U`f`a`U`b`h`Y
G`h`U`X`h`:`Y`b`[`Y`b`V`U`W`_`]b`X`Y`f`B`À`Y`Y]b`k`U`\`f`Y`f`:`Y`Y`]a`h][`d`d`"
8]Y`:`U`W`k`Y`f`_`\`À`i`g`Y`f`i`b`X`X`Y`f`\]g`h`c`f]g`W`Y`A`U`f`_`h`d`U`h`n`U`X`Y`b
ni`a`i`J`Y`f`k`Y]Y`b`Y]b`"

9]b`k`Y]h`Yf`Y`f`g`d`U`b`b`Y`b`X`Y`f`C`f`h`]a`F`Y`]b!<i bgfØW_!`fY]g`]gh`X]Y`

Ji`_UbfY[]cb`VY]`6cddUfX""<]Yf`_ÖbbYb`6Ygi WXYf`X]Y
 , VYffYghY`U`hYf`Ji`_UbY`YbhXYW_Yb`i bX`g]W`Ui ZY]bY
 [Yc`c[]gWXY`FY]gY`VY[YVYb""8]Y`K UbXYfi b[Yb`Xi fW`X]YgY
 Y]bn][Ufh][Y`@UbXgW`UZh`V]YhYb`X]Y`A Ö[`]W`_Y]hž`X]Y`B Uhi`f`b`j`\fYf
 i bVYfØ`fhYb`i`cfa`ni`Yf`YVYb"

5i`gZi`[]gn]Y`	6YgcbXYf`Y]hYb	H]ddg
GW`]bXYf`UbbYgfUX k`Y[A`U`Yf]gW`Y @UbXgW`UZh`i`bX Y]bXfi`W`_g]c``Y 5i`gV`]W`_Y	:`fØ`\`a`cf[Ybg ghUfhYbž`i`a A`YbgW`Yba`UggYb`ni j`Yfa`Y]XYb
?`UddY`	HfUX]h]cbY``Y 5fW`]hY`_hi`fi`bX Ui`h\Ybh]gW`Y 5ha`cgd`\`ÄfY	@c`_U`Y`GdYn]U`]h`ÄhYb dfcV]YfYb
Ji`_UbfY[]cb`VY] 6cddUfX	;`Yc`c[]gW`Y 6YgcbXYf`Y]hYb`/ Ji`_Ub[YghY]b	:`YghY K`UbXYfgW`i`\Y hfU[Yb

:`Øf`i`YgW`]W`hg]bhYfYgg]YfhY`Ya`dZ]Y`\`h`g]W`Y]b`6Ygi`W`XYg`
 :`fY]`]W`ha`i`gYi`a`g`]b`6UX`GcVYfb`\Y]a`""<]Yf`k`YfXYb`U`hY
 <UbXk`Yf`_ghYW`b]_Yb`i`bX`XUg`@YVYb`]b`XYf`FY[]cb`Y]bXfi`W`_g]c``
 XUF[YghY``h`C`Zh[]Vh`Yg`Ui`W`gdYn]Y``Y`J`YfUbghU`hi`b[Ybž`X]Y`Y]bYb
 h]YZYb`9]bV`]W`_]b`j`Yf[Ub[YbY`NY]hYb`V]YhYb"

9]b`k`Y]hYfYg`ž`k`Y``]gh`X]Y`F`i`]bY`XYf`5`hYb`6i`f[]b`XYf`B`Ä`Y
 j`cb`_`g`c`j`Ybn""8]YgY`VYY]bXfi`W`_YbXYb`i`VYffYghY`Y]bYf
 a`]hY`U`hYf`]W`Yb`6i`f[``]Y[Yb`\cW`cVYb`Ui`ZY]bYa`i`<Ø[Y`i`bX
 V]YhYb`Y]bYb`\Yff`]W`Yb`6`]W`_`Ui`ZX]Y`F`\Y]bUi`Y""8]Y`5bfY]gY`]gh
 Yhk`Ug`VYgW`k`Yf`]W`ž`UVYf`XYf`5i`gV`]W`_`YbhgW`ÄX][`h`ZØf`X]Y
 A`Ø`Yb"

B`Uhi`f`]YV`\UVYf`gc``hYb`i`bVYX]b[`h`X]Y`i`Y`gYb`UbXgW`UZh`VY]
 @]b[Yf`\U`b`Yf`_i`bXYb""8]YgY[Yc`c[]gW`Yb`i`cfa`Uh]cbYb`g]bX
 gck`c`\`UhYa`VYfUi`VYbX`U`g`Ui`W`ZUgn]b]YfYbX`i`bX`V]YhYb`]XYU`Y
 K`UbXYfk`Y[Y`UVgY]hg`XYg`A`UggYbhci`f]ga`i`g"

5VYf`b]W`h`bi`f`X]Y`@UbXgW`UZh`\Uhj`]Y`ni`V]YhYb""8]Y`FY[]cb`]gh

Ui W\`VY_Ubbh`Z0f`]\fY`_`Y]bYbž`cZh`ZJa`]`Yb[YZ0\fhYb`K`Y]b[0hYf"
8]YgY`V]YhYb`K`Y]bdfcVYb`i`bX`:`0\fi`b[Yb`Ubž`VY]`XYbYb`a`Ub
X]Y`5ha`cgd\`AfY`XYf`K`Y]b\YfghY`i`b[`U`i`hbU\`Yf`VYb`_`Ubb"
9]b[Y`K`Y]b[0hYf`\UVYb`Ui`W\`[Ya`0h]W\Y`GhfUi`»`k`]fhgW\UZhYbž`k`c
a`Ub`fY[]cbU`Y`GdY]gYb`dU]fYX`a`]h`\Yff`]W\Yb`K`Y]bYb`[Yb]Y»`Yb
_`Ubb"

- K`Y]b[i`h`G`W\`a`]hh.`6Y`_Ubbh`Z0f`gY]bYb`F`Yg`]b[`i`bX`X]Y
`Yfn`]W\Y`;`UghZfYi`bXgW\UZh"
- K`Y]b[i`h`K`YVYf.`6]YhYh`Y]bY`hc``Y`5i`gk`U\``Ub
Gd`AhVi`f[i`bXYf`i`bX`k`i`bXYfVUfY`D]W_b]W_d`AhY"
- K`Y]b[i`h`<`i`b`gf0W_.`DYfZY`_h`Z0f`Y]bY`[YZ0\fhY`Hci`f
Xi`fW\`X]Y`K`Y]bVYf[Y"

8]Y`W\Ufa`UbhYb`_`Y]bYb`C`fhYž`X]Y`XUg`<`Yfn`XYg`<`i`b`gf0W_g
V]`XYbž`UXYb`XUni`Y]bž`g]W\`ni`j`Yf`]YfYb"``<]Yf`[]Vh`Yg`nU\`fY]W\Y
A`0`[]W\`_Y]hYbž`X]Y`NY]h`VY]Y]bYa`[Ya`0h]W\Yb`GdUn]Yf[Ub[`cXYf
Y]bYf`F`UXhci`f`ni`j`YfVf]b[Yb"J]Y`Y`XYf`_`Y]bYb`8`0fZYf`g]bX`gc
k`Yb[]VYgi`W\hž`XUgg`a`Ub`XUg`;`YZ0\``U`hž`X]Y`FY[]cb[]Ubn`Z0f
g]W\`U`Y]b`ni`_`UVYb"

I`a`X]Y`j`YfghY`W_hYb`G\`AhY`XYg`F`Y]b!`<`i`b`gf0W_!`?`fY]gYg`k`]f`_]W\`
ni`Yb`hXYW`_Ybž`Ya`dZ]Y`\`h`g]W\`Y]bY`Yb`hgdUb`bhY`F`Y]gYž`VY]`XYf`XYf
K`Y[]XUg`N]Y`]gh"BY`a`Yb`G]Y`g]W\`NY]hž`i`a`X]Y`_`Y]bYb`8`YhU]`g`ni
[Yb]Y»`Ybž`X]Y`X]Y`FY[]cb`gc`VYgcbXYfg`a`UW\Yb"J`cb`XYb
i`bj`Yf[Ygg]W\Yb`5i`gV`]W`_Yb`0VYf`X]Y`K`Y]b`Ub`XgW\UZhYb`V]g`\]b
ni`XYb`\Yfn`]W\Yb`9]b\Y]a`]gW\Ybž`YXYf`C`fh`\Uh`gY]bY`Y][YbY
;`YgW\]W\hY`ni`Yfn`A`\Yb"

5`gc`d`UW`_Yb`G]Y`A`fY`K`Ub`XYfgW\i`Yž`gW\`b`UddYb`G]Y`g]W\`A`fY
?`Ua`YfU`i`bX`a`UW\Yb`G]Y`g]W\`VYfY]hž`X]Y`j`YfVcf[YbYb`G\`AhY
XYg`F`Y]b!`<`i`b`gf0W_!`?`fY]gYg`ni`Yf`_i`bXYb`°

6Ygi W\ Yb 'G]Y 'i bg 'Ui Z. 'Y]bY!fY]gY"XY