

èñ\ Ua . : `ØW h`b[Y`_Àa dZYb`[Y[Yb
5VgW]YVi b[`!`GY]a `!< cZ`b` ; YZU\ f

&*`i`_fU]b]gWY : `ØW h`b[Y`]b`èñ\ Ua `j`cb`5VgW]YVi b[
VYXfc\hž`bUWXYa `@UbXfUhgUa`h`HfUi`bghY]b`+\$\$\$`9i`fc
JYfhfU[g_ØbX][i b[`j`c`n]Y\h"



è`XYf`VYgW Ui `]WYb`VUmYf]gWYb` ; Ya`Y]bXY`èñ\ Ua `YffgW h
XYfnY]h`5i`ZfY[i b[" ; fi`bX`XUZØf`]gh`X]Y`Xfc\YbXY`5VgW]YVi b[
j`cb`&*`i`_fU]b]gWYb` : `ØW h`b[Yb`"8Yf`GhY]b`XYg`5bghc»Yg.`XUg
@UbXfUhgUa`h`HfUi`bghY]b`\Uh`XYb`l`bhYfvf]b[i b[gj`YfhfU[`ZØf`XYb
GY]a`!<cZ[Y_ØbX][h`"8]YgYf`gdYn]Y``_cbn]d]YfhY`<cZ`VY\YfVYf[hY
V]g\Yf`b]W h`bi`f`X]Y : `ØW h`b[Yž`gcbXYfb`ghUbX`Ui`W`ZØf
Ø_c`c[]gWY`@UbXk`]fhgWUZhi`bX`X]Y`l`bhYfghØhni`b[`j`cb
A`YbgWYb`a`]h`idgmW]gWYb`DfcV`Ya`Ybž?`]bXYfb`i`bX
6Y\]bXYfhYb"

?f]h]_`Ua`cZ]n]Y`Yb`J`cf[Y\Yb`V`Y]Vh`b]W h`Ui`g`"8Yf`@Y]hYf`XYg
GY]a`!<cZY`g`ghY`h`]b` : fU[Yž`cV`XUg`@UbXfUhgUa`h`Y]bY

a YbgWXYbk ØfX][Y' l bhYfVf]b[i b[' [Yk Å\ f'Y]ghYb' _Ubb" CVk c\`
XYf' < cZbUWXYf' ? ØbX][i b[' _Y]bY' Z]bUbn]Y'' Y' l bhYfghØhni b[
a Y\ f' Yf\ Å\ hž' nY][Yb' X]Y' : ' ØW h]b[Y \]Yf' [fc » Yb' Ni gUa a Yb\ U' h"
9]b][Y' j cb']\ bYb' UfVY]hYb' U' g' 8 c' a YhgWXYfž' 9fn]Y\ Yf' cXYf
@UbXk]fhgWUZhg\ Y' ZYf' i bX' j Yfgi WXYb' gcž' XYb' : cfhVYghUbX' XYg
< cZg' ni a]bXYghj cf' Åi Z][' ni ' g]WXYfb"

8]Y 'G]W h k Y]gY 'XYf' J YfUb h k c f h`]W Y b

@UbXfUhG]Y[Z]YX' K U' W' f7 GI Ł' j YfhY]X][h' X]Y' 9bhgWXY]Xi b[' XYg
@UbXfUhgUa hYg' YXcW' j Y\ Ya Ybh' 9f' VYhcbh[Y[YbØVYf' XYa
: cW' gž' XUgg' X]Y' a cbUh]WXYb' ? cghYb' j cb' V]g' ni ' + \$" \$\$\$ ' 9i fc' XYa
GhYi YfnU\ Yf' b]W h' k Y]hYf' ni ni a i hYb' gY]Yb" 8]YgY' Ybcfa Yb
5i g[UVYb' YbhghUbXYb' Xi fW' X]Y' 6Y\ YfVYf[i b[gj YfhfÅ[Yž' X]Yž' gc
K U' W' ž']b']\ fYf' < Ø\ Y' i bhfU[VUf' [Yk cfXYb' gY]Yb" 8 Yg' K Y]hYfYb
Yfk Å\ bh' K U' W' ž' XUgg' XYb' : ' ØW h]b[Yb' a Y\ fZUW' U' hYfbUh]j Y
l bhYfVf]b[i b[Yb' Ub[YVchYb' k cfXYb' gY]Ybž' X]Y' YXcW' UV[Y' Y\ bh
k i fXYb"

CVk c\` XYf' GY]a ' ! < cZ' Y]b' C fh' XYf' ð _' i g]cb' i bX' Ø_ c' c[]gWXYb
BUW\ U' h][_Y]h]ghž' k]fX' j ca ' @UbXfUhgUa h' _Y]bY' bYi Yf']WXY
J YfhfU[gj Yf' Åb[Yfi b[']b' 6YhfUW h[Ync[Yb" ' K U' W' VYhcbhž' XUgg
Y]b' l a ni [' XYf' : ' ØW h]b[Y' ni a i hVUf' gY]i bX']a ' G]bbY' XYg
GhYi YfnU\ Yfg']Y[Y"

8]Y 'G]hi Uh]cb' V' Y]Vh' Ui Z A YggYfg' GWX bY]XY" 8 Yf' fYW h]WXY' GhfY]h
ØVYf' X]Y' Ni _i bZi' XYg' GY]a ' ! < cZg' i bX' XYf' Xcfh' i bhYf[YVfUW hYb
: ' ØW h]b[Y']gh' bUW' k]Y' j cf' i b[Y' Øgh" 8]Y' : ' ØW h]b[Y' \ UVYb
]bnk]gWXYb' ? ' U[Y' VY]a ' J Yfk U' hi b[g[Yf]W h' Y]b[YfY]W hž' i a ' Y]bY
j cf' Åi Z][Y' F Åi a i b[' ni ' j Yf\]bXYfb" 6]g\ Yf' a]h' 9fZc' [ž' XcW' X]Y
Ni _i bZi' V' Y]Vh' i b[Yk]gg"

? cghYb' i bX' ? cbgYe i YbnYb' XYf' J YfhfÅ[Y

9]b' 6']W_ ' Ui ZX]Y' Z]bUbn]Y'' Yb' 5gdY_ hY' : 8]Y' \ c\ Yb' ? cghYb' XYf
a cbUh]WXYb' 6Y\ YfVYf[i b[ž' X]Y' g]WXYb' Ui Z' V]g' ni ' + \$" \$\$\$ ' 9i fc
gi a a]YfYbž' \ UVYb' XYb' 5i ggW' U[' ZØf' X]Y' ? ØbX][i b[' [Y[YVYb"
8]YgY' Z]bUbn]Y'' Y' 6Y' Ughi b[' hfÅ[h' XYf' GhYi YfnU\ Yfž' i bX' ' Ui h

@UbXfUh'K U`W`]gh'X]Yg'b]W`h`Åb[Yf`hfU[VUf"8]Y`9bhgW`Y]Xi b[
XYg`@UbXfUhgUa hYgž'XYb`J YfhfU[`ni`VYYbXYbž`VUg]Yfh'XU`Yf
df]a`Åf`Ui ZXYf`k]fhgW`UZh]W`Yb`G]W`hk Y]gY"

;`Y]W`nY]h][`]gh'XYf`GY]a`!<cZ'a`]h'gY]bYf`F c`Y`U`g`Ni Zi W`hgc`fh`ZØf`
j`]Y`ZUW`VY`UghYhY`A YbgW`Yb`j`cb`[fc»Yf`6YXYi hi b[" "<]Yf`k]fX
≠_`i`g]cb`[Y`YVh'i`bX`[YZØfXYfh"8]Y`9bhgW`Y]Xi b[`XYg
@UbXfUhgUa hYg`U`h`XU`Yf`b]W`h`bi`f`X]fY`hY`?`cbgYei`YbnYb`ZØf`X]Y
: `ØW`h]b[Yž`gcbXYfb`Ui W`ZØf`X]Y`[YgUa`hY`;`Ya`Y]bXYghfi`_hi`f"

⇒`<]bhYf[fi`bX`V`Y]Vh`X]Y`<cZb`i`b[`Ui`Zni`gÅh`]W`Y
I`bhYfghØhni`b[`Xi`fW`Y]bY`J`YfY]bVUfi`b[`a`]h`XYf`FY[]Yfi`b[`j`cb
C`VYfVUmYfb"8Yf`@Y]hYf`XYg`<cZ`g`g`Ymh`XUfUi`Z`XUgg`Z]bUbn]Y`Y
9bhUghi`b[`i`bX`bYi`Y`J`YfY]bVUfi`b[Yb`Y]bY`a`YbgW`Ybk`ØfX][`Y
I`bhYfVf]b[i`b[`k`Y]hYf`]b`Yfa`Ø[`]W`Yb`_ØbbhYb"

K Ug`X]Y`Ni`_i`bZh`Vf]b[`h`

8]Y`Ub[YgdUbbhY`@U[Y`]b`≠n`Ua`]gh`VYnY]W`bYbX`ZØf`j`]Y`Y
Å`b`]W`Y`G]hi`Uh]cbYb`Vi`bXYgk`Y]h`K`c`c`Y`?`cghYb`i`bX
a`YbgW`]W`Yg`@Y]X`Ui`Z]bUbnXYfhfYZZYbž`g]bX`_`UfYž
a`YbgW`Ybk`ØfX][`Y`@Øgi`b[Yb`b`chk`YbX][`"8]Y`;`YgW`]W`hY`XYg
GY]a`!<cZg]b`≠n`Ua`[]Vh`Y]bYb`h]YZYb`9]bV`]W`_]b`X]Y`_ca`d`Yi`Yb
<YfUi`gZc`fXYfi`b[Yb`VY]`XYf`I`bhYfVf]b[i`b[`j`cb`:`ØW`h]b[Yb`i`bX
XYb`XUa`]h`j`YfVi`bXYbYb`?`cghYb"CV`g]W`]b`b`ÅW`ghYf`NY]h`Y]bY
@Øgi`b[`Z]bXYb`Ågghž`V`Y]Vh`UVni`k`UfhYb"?"`Uf`]gh`YXcW`ž`XUgg`XYf
K`Y[`ni`Y]bYf`hfU[ZÅ][`Yb`i`bX`i`a`Ub]hÅfYb`@Øgi`b[`bcW`k`Y]h`]gh"

F YU`_h]cbYb`XYf`5bk`c`bYf`i`bX`

;`Ya`Y]bgW`UZh`

8]Y`9bhgW`Y]Xi`b[`ni`f`?ØbX][`i`b[`XYg`I`bhYfVf]b[i`b[`gj`YfhfU[`g
i`bX`X]Y`Xfc`YbXY`5VgW`]YVi`b[`XYf`i`_fU]b]gW`Yb`:`ØW`h]b[Y
`UVYb]b`XYf`;`Ya`Y]bXY`[`Ya`]gW`hY`FYU`_h]cbYb`Yfj`cf[`Yfi`ZYb`
9]b][`Y`5bk`c`bYf`nY][`Yb`J`YfghÅbXb]g`ZØf`X]Y`Z]bUbn]Y`Yb`:`fØbXY
XYg`@UbXfUhgUa`hYgž`k`Å`fYbX`UbXYfY`]`fY`Gc`]XUf]hÅh`a`]h`XYb
VYhfcZZYbYb`:`Ua`]Yb`VY`_i`bXYb"@"`_U`Y`<`]Zgcf[`Ub]gUh]cbYb`i`bX

?]fWYb` \UVYb`]\fY`I bhYfghØhni b[`ni [YgU[hi bX`ZcfXYfb`Y]bY
a YbgWYbk ØfX][Y`@Øgi b["

8]Y`6Øf[Yf]b]h]Uh]j Y` 6`Y]VYfYW`h`ZØf`U`Y` \Uh`g]W`fUgW`Zcfa`]Yfh
i bX`cf[Ub]g]Yfh`fY[Y`a`À»][`?`i bX[YVi b[Yb`i bX
≠Zcfa`Uh]cbgj YfUbghU`hi b[Yb`ž`i a`Ui ZX]Y`G]hi Uh]cb`XYf
: `ØW`h`b[Y`Ui Za`Yf_gUa`ni`a`UW`Yb`" 8]YgY`A`YbgWYb`VfUi`W`Yb
i bgYfY`<`]ZY`i bX`Gc`]XUf]h`h`ž`gc`Y]b`GdfYW`Yf`XYf`≠]h]Uh]j Y`]b
Y]bYa`≠hYfj`]Yk`a`]h`XYf`GØXXYi`hgW`Yb`NY]hi b["`6YgcbXYfY
6Ygcf[b]g`Ai`»Yfb`X]Y`5bk`c`bYf`ni`XYa`ØVYf`X]Y`Ni`_i`bZ`h`XYf
²`_c`UbXk`]fhgW`UZh`i bX`X]Y`≠`_i`g]cbgd`fc`Y`hY`XYg`GY]a`!<c`Zg"

<]ghc`f]gW`Y`DUfU`Y`Y`b`ni`f`:`ØW`h`]b[`gd`c`]h]_
]b`8`Yi`hgW`U`b`X`

9]b`6`]W`_]b`X]Y`Øb[YfY`;`YgW`]W`hY`8Yi`hgW`U`b`X`g`nY][`h`ž`XUgg`Yg
]a`a`Yf`k`]YXYf`5i`gY]bUbXYfgYhni b[Yb`i`a`X]Y`I`bhYfVf]b[i b[`j`cb
: `ØW`h`b[Yb`[Y[YVYb`U`h`"6YgcbXYfg]j Yf[`Y]W`VUf`]gh`X]Y
G]hi Uh]cb`a`]h`XYb`Ni`gh`b`XYb`k`À`fYbX`XYf`gc[YbUbbhYb
: `ØW`h`b[g_f]gY`&\$%)`#&\$%*"8Ua`U`g`_Ua`Yb`V]bbYb`_i`fnYf`NY]h
<i bXYfhUi`gYbXY`A`YbgW`Yb`b`UW`8Yi`hgW`U`b`X`ž`i`a`j`cf`?`f]Y[
i bX`J`YfZc`[i b[`ni`Z]Y`Y`b`"8Yf`XUa`U`][Y`I`a`[Ub[`a`]h`XYb
: `ØW`h`b[Yb`ZØ`fhY`ni`dc`Uf]g]YfYbXYb`dc`]h]gW`Yb`8YVUhYb`i`bX
hY]`g`W`Uch]gW`Yb`Ni`gh`b`XYb`VY]`XYf`I`bhYfVf]b[i b["

K]Y`Ui`W`]b`XYf`U`_hi`Y`Y`b`G]hi Uh]cb`]b`≠n`Ua`ž`ghUbXYb
?ca`a`i`bYb`i`bX`@UbXfUhg`A`a`hYf`j`cf`XYf`<`YfUi`gZc`fXYfi`b[ž
\`i`a`Ub]h`fY`≠hYfYggYb`a`]h`XYb`k`]fhgW`UZh]W`Yb`A`Ø[`]W`_Y]hYb`]b
9]b`_`Ub[`ni`Vf]b[Yb`"C`V`k`c`X`Y`XUa`U`][Yb`Ni`gh`b`XYb`]W`h`Y]bg
ni`Y]bg`a`]h`XYb`Y`i`h][Yb`j`Yf[`Y]W`VUf`g]bX`ž`j`YfXYi`h]W`Yb`g]Y
XcW`ž`XUgg`X]Y`:`fU[Y`XYf`:`ØW`h`b[gi`bhYfVf]b[i b[`]b
8Yi`hgW`U`b`X`]a`a`Yf`k`]YXYf`X]Y`;`YgY`gW`UZh`gdU`hYhi`bX`ni
?cbhfcj`YfgYb`ZØ`fh"

<]bhYf[fi`bX]bZcfa`Uh]cbYb`ni`f
: `ØW`h`]b[gg]hi`Uh]cb`]b`6UmYfb

8]Y`U``[Ya Y]bY': `ØW`h]b[gg]hi Uh]cb`]b`6UmYfb`]gh`_ca`d`YI`i`bX
k]fX`j`cb`j`YfgW`]YXYbYb': U`_hcfYb`k`]Y`XYf`dc`]h]gW`Yb
; fc» k YhhYf`U[Yž`XYf`K`]fhgW`UZh`g`U[Y`i`bX`XYb`gc`n]U`Yb`Ghfi`_hi`fYb
VYY]bZi`ggh`"6UmYfb`]gh`Ui`Z[fi`bX`gY]bYf'; fØ» Y`i`bX
k]fhgW`UZh`]W`Yb`Gh`Åf`_Y`Y]bYg`XYf`6i`bXYg`ÅbXYfž`XUg`Y]bY`[fc» Y
NU\`Ub': `ØW`h]b[Yb`Ui`Zb]a`a`h`@Ui`h`XYa`i': `ØW`h]b[gfUh`6UmYfb
g]bX`XYfnY]h`ØVYf`%, \$"\$\$\$': `ØW`h]b[Y`]a`i`@UbX`fY[]ghf]Yfh"

⇒a`i`@UbX`fY]g`HfUi`bghY]b`YVYb`U`_hi`Y``fi`bX`%`&\$\$': `ØW`h]b[Yž
k`cj`cb`Y]b`VYhf`ÅW`h]W`Yf`HY]`gY]h`6Y[]bb`XYg`i`_fU]bY]!`?`f]Y[Yg
[Y`_ca`a`Yb`]gh`"8]Y`<YfUi`gZcfXYfi`b[Yb`fY]W`Yb`]cb`XYf
6YfY]hghY``i`b[`UX`Åei`UhYf`i`bhYf`_Øb`ZhY`ØVYf`X]Y`≠hY[fUh]cb`]b`XYb
5fVY]hga`Uf`_h`V]g`\]b`ni`f'; Yk`Å`f`Y]ghi`b[`Ub[Ya`YggYbYf`gc`n]U`Yf
l`bhYfghØhni`b["`8Ug`@UbXfUhgUa`h`Uf[i`a`Ybh]Yfhž`XUgg`X]Y
?ØbX][i`b[`XYg`j`YfhfU[g`a`]h`XYa`i`GY]a`i`!<cZY]bY`Bchk`YbX][_Y]h
k`Ufž`i`a`X]Y':]bUbna`]hhY`YZZ]n]YbhYf`ni`bi`hnYb`i`bX`UbXYfYb
Xf]b[YbXYb`6YXØfZb]ggYb`[YfYW`h`ni`k`YfXYb"

Gcn]U`Y`i`bhYfghØhni`b[`i`bX`≠bhY[fUh]cb

≠6UmYfb`[]VhYg`j`YfgW`]YXYbY`Dfc[fUa`a`Yž`X]Y`X]Y`≠hY[fUh]cb
j`cb': `ØW`h]b[Yb`i`bhYfghØhni`b`gc``Ybž`k`]Y`n`6`"GdfUW`_i`fgYž
5fVY]hga`Uf`_h]bhY[fUh]cb`i`bX`gc`n]U`Y`6YfUhi`b[gX]YbghY`"8Ug
6i`bXYgUa`h`ZØf`A`][fUh]cb`i`bX': `ØW`h]b[Y`f65A`:`Ł`i`bX`XUg
6UmYf]gW`Y`GhUUhga`]b]ghYf]i`a`XYg`≠bYfbž`ZØf`Gdcfh`i`bX
≠hY[fUh]cb`UfVY]hYb`Yb[`ni`gUa`a`Ybž`i`a`g]W`Yfni`ghY``Ybž`XUgg
: `ØW`h]b[Y`X]Y`bchk`YbX][Y`i`bhYfghØhni`b[`Yf`U`hYbž`i`a`g]W`]b
X]Y'; YgY``gW`UZh`ni`]bhY[f]YfYb`"8]Y`Z]bUbn]Y``Yb
<YfUi`gZcfXYfi`b[Yb`i`bX`UXa`]b]ghfUh]j`Yb`<ØfXYb`a`UW`Yb`X]Yg
YXcW`ni`Y]bYf`gW`k`]Yf][Yb`5i`Z[UVY"

GhUh]gh]_Yb`i`bX`8UhYb`ni`f

?cghYbYbhk`]W`_`i`b[

A`cbUh

?cghYb`f]b`9i`fcŁ

Ųbi`Uf`&\$\$'	*)`\$\$\$\$
:`YVfi`Uf`&\$\$'	**`\$\$\$\$

A Äfn'&\$&'	*, "\$\$\$
5dfj'&\$&'	+"\$\$\$\$

8]Y`HUVY`Y`nY][h`X]Y`a`cbUh]W`Yb`?cghYb`XYf`l`bhYfVf]b[i`b[`XYf`
: `ØW`h]b[Y`Ui`Z`XYa`GY]a`!<cZ]a`!`f`&\$&'`"8]YgY`NU`Yb`
j`YfXYi`h]W`Yb`ž`k`Ufi`a`XUg`@UbXfUhgUa`h`HfUi`bghY]b`Yb`hgW`jYXž`
XYb`J`YfhfU[`ni`_ØbX][Yb" 8]Y`Z]bUbN]Y`Yb`6Y`Ughi`b[Yb`g]bX`ZØf`
XYb`@UbX`fY]g`b]W`h`a`Y`f`hfU[VUf`ž`gc`@UbXfUh`K`U`W`":`Øf`
k`Y]hYfY`æ`Zcfa`Uh]cbYb`_ØbbYb`æ`hYfYgg]YfhY`X]Y`K`YVgY]hYb`XYg`
6i`bXYgUa`hg`ZØf`A`][fUh]cb`i`bX`:"ØW`h]b[Y`gck`jY`XYg`
6UmYf]gW`Yb`GhUUhga`j]b]ghYf]i`a`g`XYg`æ`bYfb`ž`ZØf`Gdcfh`
i`bX`æ`hY[fUh]cb`VYgi`W`Yb"

B 5;

8YhU]`g

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