

J]Y`ZÄ`h][Y`J YfUbg hU`hi b [Yb`]b` ; YfU.
GØ`nYbZYghž`DUfhmg`i bX`a Y`f°

5_hi Y`Y`B UW f]W hYb`Ui g; YfU. GØ`nYb_Öb][` [Y_Øfhž`bYi Y
: cfYj Yf`Mci b [`DUfhm`i bX`6YfUhi b [gbUW a]hU [`]b`XYf
Jc`_g\cW gW i`Y"

⊕; YfU`i bX`i a [YVi b [`]Vh`Yg`Y]bY`J]Y`nU`gdUbbYbXYf
9fY][b]ggYž`X]Y`gck c\`X]Y`c_U`Y`?i`hi`f`U`g`Ui`W`X`Ug
[YgY`gW`UZh]W`Y`@YVYb`VYfY]W`Yfb`"8]YgY`K`cW`Y`k`i`fXYb
nU`fY]W`Y`5_hj]h`hYb`i`bX`J`YfUbg`hU`hi`b [Yb`Ub [Y_ØbX][`hž`X]Y
gck c\`X]Y; Ya`Y]bgW`UZh`i`bhYfghØ`hnYb`U`g`Ui`W`X]Y`c_U`Y
@YVYbgei`U`]h`h`ZØfXYfb"

9]b`<][` \][` \h`XYf`K`cW`Y`k`Uf`X]Y`DfY]g]Yf`Y]\i`b [`XYg
GØ`nYb_Öb][`g`&\$&(`VY]a` `&`"GØ`nYbZYgh`i]b` ; YfU!<Y]bf]W`g [fØb"
8Yf`K`Y`hVYk`YfVž`VY]`XYa` `YW_YfghY`GØ`nYb` [Y_Øfhk`YfXYbž
VfUW`hY`XYb`Dc_U`YfbYi`h`Ub`XYb` ; `cVi`g; YfU!HfYVb]h`"8UVY]
\UbXY`h`Yg`g]W`i`a` `Y]b`hfUX]h]cbY`Yg; Yf]W`h`Ui`g; `Y]gW`ž`XUg`]b
XYf`FY []cb`gY`f` [YgW`Ä`h`h`k`]fX`"8Yf`nk`Y]hY`D`U`h` []b [`Ub`X]Y
: `Y]gW`YfY]; ÖVY`Ui`g`DØ`n][`ž`k`Ä`fYbX`XYf; `cVi`g`<Yfa`gXcfZ`XYb
Xf]hYb`F`Ub [`VY`Y [hY`"8]Y`C`f [Ub]gUhc`fYb`<Y]bn`Ni`VY`_i`bX`5bXfÅ
GhÖ»Y`ØVYffY]W`hYb`XYb`Dc_U`Ub`XYb`G]Y [Yf`HcV]Ug`9]W`Yfž`k`Ug
XUg; Ya`Y]bgW`UZh]g [YZØ\`i`bX`X]Y; fYi`XY`Ub`fY []cbU`Yb
GdYn]U`]h`h`hYb`i`bhYfghf]W`"

B Yi Y`DUfhma` Ò [`]W`_Y]hYb`]b`XYf`GhUXh

K`Y]hYf\]b`k`]fX`]b; YfU`a`]h`GdUbbi`b [`X]Y` : cfYj`Yf`Mci`b [`DUfhm
Yfk`UfhYhž`X]Y`Ua` `GUa`ghU [ž`XYb`" %`"5i [i ghž`]a` `7`i`VnYbhfi`a
7ca`a`U`ghUhhz]bXYh`"8]YgY`J`YfUbg`hU`hi`b [`n]Y`h`XUfUi`Z`UVž`Y]b
bYi`Yg` , ` \$!DUfhmZcfa`Uhini`Y`hUV`]YfYb`"A`]h]`YfgW`]YXYbYb

HUbnVYfY]W\Yb'i bX'Y]bYf'5i gk U\`Ub'A i g]_Ui g'j YfgW\]YXYbYb
>U\fnY\bhYbž'k]fX'8>A]W\UY`' 6YUh`cdg`BU[`Yf'X]Y'; ÅghY`]b
XYb'7ca a U!GUU`'cW_Yb": Øf'Y]bY`YbhgdUbbhY`5ha cgd\ÅfY'gcf[h
XYf'C dYb!5]f!9j Ybh[UfhYbž'k c'7cW_hU]`g'i bX'6`UW`_A i g]W
[YbcggYb'k YfXYb`_ØbbYb"H]W_Yhg'g]bX'j]b`XYf'; YfU!`Zcfa Uh]cb
gck]Y`cb`]bY`Yf\`Å'h]W`"8]YgY`ϕ]h]Uhj] Y`nY][hž'XUgg'; YfU`Y]b`C fh
ZØf`U`Y`5`hYfg[fi ddYb'gY]b`_Ubbž]bXYa`Yg'Y]b
UVk YW\g'i b[gfY]W\Yg': fY]nY]hUj[YVch'gW\UZh"

9]b'k Y]hYfYf'k]W\h][Yf`HYfa]b`]b'; YfU`]gh`XYf
6YfUhi b[gbUW\ a]hU[`Ub`XYf`J c`_g\cW\gW\i`Yž'XYf`Ua
8cbbYfghU[ž'XYb`&- "5i [i ghž'j cb`%) . ' \$`V]g`%`'I \f`ghUhhZ]bXYh"
<]Yf`_ØbbYb'g]W\`ϕhYfYgg]YfhY`ØVYf`XUg`bYi Y`?i fgdfc[fUa a
]bZcfa]YfYb'i bX'j]bX]j]Xi Y`Y`6YfUhi b[Yb`]b`5bgdfi W\`bY\`a Yb"
BYVYb`GdfUW\`_i fgYb'k YfXYb`Ui W\`_fYUh]j Y`K cf_g\cdg`k]Y
GW\fy]V`_i fgY`i bX`H\YUhYfUi ZØ\fi b[Yb`Ub[YVchYb`"8]Yg`]gh`Y]bY
[fc»Ufh][Y'; Y`Y[Yb\Y]h`ZØf`X]Y`6Øf[Yfž'\fY': Å\][_Y]hYb`ni
Yfk Y]hYfb'i bX`bYi Y`ϕhYfYggYb`ni`YbhXYW_Yb"

K]W\h][Y`ϕZfUghfi _hi fdfc`^Y`_hY`]a`@UbX`_fY]g
; fY]n

5i » Yf\U`V`j cb'; YfUž]b`A ØbW\YbVYfbgXcfZž'k]fX`Ua`" "
GYdhYa VYf`XUg`f]W\hZgh`ZØf`XYb`bYi Yb`GW\i`WUa`di g`[YZY]Yfh"
A]h`Y]bYa`ϕj Ygh]h]cbgj c`i a Yb`j cb`fi bX`-ž) `A]`]cbYb`9i fc`]gh
X]Yg`XUg`[fØ»hY`GW\i`VUi dfc`Y`_h]a`@UbX`_fY]g'; fY]n" Gc`W\Y
9bhk]W`_i b[Yb`g]bX`YbhgW\Y]XYbX`ZØf`X]Y`ni`_ØbZh][Y
6]Xi b[g`UbXgW\UZh]b`XYf`fY[]cb`i bX`nY][Ybž'XUgg']b`X]Y
J YfVYggYfi b[]cb`GW\i`Yb`]bj Ygh]Yfh'k]fXž'i a`ei U`]hUhj]
\cW\k Yfh][Y`6]Xi b[`ni`ZØfXYfb"

ϕ`5`hYbVi f[`k]fX`Y]bY`6YfUhi b[`XYf`6i bXYgk Y\`f`ni`6Yfi Zg!`i bX
Ghi X]Yba Ø[`]W\`_Y]hYb`ghUhhZ]bXYb`"5a`8cbbYfghU[ž'XYb`&- "
5i [i ghž'_ØbbYb`ϕhYfYgg]YfhY`]a`6Yfi Zg]bZcfa Uh]cbgnYbhfi a
a Y\`ØVYf`5i gV]Xi b[ga Ø[`]W\`_Y]hYb`i bX`@Ui ZVU\`bYb`YfZU\`fYb"
8]YgY`ϕ]h]Uhj] Y`n]Y`h`XUfUi ZUVž`↑ b[Y`A YbgW\Yb`ni`]bZcfa]YfYb
i bX`]bYb`X]Y`J]Y`ZU`h`Ub`VYfi Z]W\Yb`7\UbW\`b`Ui Zni nY][Ybž'X]Y
X]Y`6i bXYgk Y\`f`V]YhYh`8Yf`Ni [Ub[`ni`gc`W\Yb`ϕZcfa Uh]cbYb`]gh

ZØf'j]Y`Y`Yb hgWXY]XYbXž`XU`g]Y`X]Y`K U\`]\fYg`_ØbZh][Yb`6Yfi Zg
VYY]bZi ggYb`_ØbbYb"

8]Y`5ba Y`Xi b[Yb`ZØf`XYb`- "'< Ò\`YfZYgh`Ui Z]b` ; YfU`Ui ZYb
VYfY]hg" 8]Y`J YfUbghU`hi b[]gh`ZØf`XYb`) "'C`_hcVYf`[Yd`Ubhi bX
V]YhYhj YfgWXYXYbY`8]ghUbnYbž`j cb`Y]bYa` ?]bXYf`Ui ZV]g`ni
`Àb[YfYb`GhfYW_Yb`ZØf`YfZU\`fYbY`@Ài ZYf" 8]Y`j Yf`Àb[YfhY
5ba Y`XYZf]gh`V]g`9bXY`5i [i gh`Yfa Ò[`]W`h`Yg`bcW`a Y\`f
HY]`bY\`a Yfbž`g]W`ZØf`X]YgY`gdcfh]WXY`< YfUi gZcfXYfi b[`ni
fY[]ghf]YfYb`i bX`g]W`Ub`Y]bYa` XYf`[fØ» hYb`@Ui ZYfY][b]ggY`XYf
FY[]cb`ni `VYhY][Yb"

8 Ug`dc`h]gWXY`@VYb`]b` ; YfU`]gh`YVYbZU`g`U`_hj ž`a]h
K U\`_Ua`dZgh`ÀbXYbž`X]Y`gck c\`j cb`fY[]cbU`Yb`DUfhY]Yb`U`g`Ui W
j cb`i bUV\`Àb[][Yb`⊕]h]Uhj Yb`cf[Ub]g]Yfh`k YfXYb" 8]YgY`Gh`ÀbXY
V]YhYb`XYb`6Øf[Yfb`X]Y`A Ò[`]W`_Y]hž`X]fY`_h`a]h? UbX]XU`hYb`ni
gdfYWXYb`i bX`⊕Zcfa`Uh]cbYb`ØVYf`X]Y`VYj c fghY\`YbXYb`K U\`Yb`ni
Yf\`U`hYb"

9]b`YVYbX][Yf`J YfUbghU`hi b[g`_U`YbXYf

5`X]YgY`J YfUbghU`hi b[Yb`i bX`⊕]h]Uhj Yb`j YfXYi`h]WXYbž`XUgg
; YfU`Y]bY`YVYbX][Y`GhUXh]ghž`X]Y`gck c\`i`hi fY`U`g`Ui W
[YgY`gW`UZh]W`U`_hj]gh" 8]Y`J]Y`ZU`h`Ub`5b[YVchYb`fY]W`hj cb
: Ygh]j U`gž`X]Y`c`_U`Y`HfUX]h]cbYb`ZY]Yfbž`ØVYf`6]`Xi b[`i bX
: cfhV]`Xi b[`V]g`\]b`ni`gdcfh]WXYb`9fY][b]ggYb"; YfU`V]YhYh`XUa`]h
Y]bY`D`UhhZcfa`ZØf`U`Y`5`hYfg[fi ddYb`i bX`⊕hYfYggYbž`k cXi fW
Y]bY` ; Ya`Y]bgW`UZh[YZØfXYfh`k]fXž`X]Y`ni gUa`a`Yb`_ca`a`hž`i`a`ni
`YfbYbž`ni`ZY]Yfb`i bX`g]W`ni`Yb[U[]YfYb"

; YfUYf`J YfUbghU`hi b[Yb`]a` , VYfV`]W_

; YfU`i bX`gY]bY`I`a` [YVi b[`V]YhYb`ØVYf`XUg`GØ`nYbZYgh`i bX`X]Y
: cfYj Yf`Mci b[`DUfhm` \]bUi`g`Y]bY`J]Y`nU\`Ub`J YfUbghU`hi b[Ybž
X]Y` ; Ya`Y]bgW`UZh`i bX`?i`hi`f`ZØfXYfb" fY[Y`a`À»][Y`9j Ybhg`k]Y
X]Y` ; YfUYf`A`i`g]_hU[Y`cXYf`XYf`K`Y]\bUW`hga`Uf`_h`n]Y\`Yb
6Ygi`WXYf`Ui`g`XYf`fY[]cb`Ub`i bX`V]YhYb`c`_U`Y`?ØbghYfb`Y]bY
D`UhhZcfa`"5i`W`J YfUbghU`hi b[Yb`ni`f`GhUXh[YgW]W`hYž`Yhk`U

[YZØ\fhY`GhUXhfi bX[Åb[Yž`k YfXYb`cZhj cb`XYf`GhUXhj Yfk U`hi b[cXYf`c_U`Yb`J YfY]bYb`cf[Ub]g]Yfh"Gc`WXY`5_hj]]hÅhYb`ghÅf_Yb b]Wkh`bi f`XUg`; Ya Y]bgWkUZhg[YZØ\`ž`gcbXYfb`UggYb`Ui Wk`bYi Y 6Ygi WkYf`X]Y`HfUX]h]cbYb`XYf`GhUXh`_YbbYb`YfbYb"

8]Y`GhUXh; YfU`]bj Ygh]Yfh`Ui Wk`]b`]fY`_i`hi fY`Y`ϕZfUghfi _hi fž k Ug`Xi fWk`nU\`fY]WkY`BYi VUi dfc`Y`_hY`gck]Y`Yf[ÅbnYbXY _i`hi fY`Y`Dfc[fUa`a`di`b`_hY`g]WkhVUf`k]fX"8]Y`J`YfUbgH`hi`b[Yb V]YhYb; Y`Y[Yb\Y]hYb`ni`a`5i`ghUi`gWk`i`bX`ni`f`ϕhYfU_h]cb`XYf 6Øf[Yf`i`bX`hfU[Yb`ni`f`GhÅf`_i`b[`XYg`gcn]U`Yb`Ni`gUa`a`Yb`U`hg VY]"ϕgVYgcbXYfY`]b`NY]hYb`XYf`gcn]U`Yb`8]ghUbn]Yfi`b[`g]bX gc`WkY`9fY][b]ggY`j`cb`[fc»Yf`6YXYi`hi`b["

6]`Xi`b[`i`bX`9bhk]W`_i`b[`]b` ; YfU

8]Y`; YfUYf`J`c`_g\cWk`gWk`i`Y`gd]Y`h`Y]bY`nYbhfU`Y`F`c`Y`]b`XYf 6]`Xi`b[`g`UbXgWk`UZh`XYf`GhUXh`A`]h`Y]bYa`VfY]hYb`5b[YVch`Ub ?i`fgYbž`j`cb`GdfUWk`_i`fgYb`V]g`\]b`ni`_fYUh]j`Yb`K`cf`_g\cdgž`k]fX XYf`dYfgØb`]WkY`i`bX`VYfi`Z]WkY`K`YfXY[Ub[`XYf`HY]`bY\`a`YbXYb [YZØfXYfh"8]Y`J`c`_g\cWk`gWk`i`Y`Yfa`Ø[`]Wkh`Ygž: Å\][_Y]hYb`ni Yfk`YfVYb`i`bX`bYi`Y`ϕhYfYggYb`ni`j`YfZc`[Ybž`k`Ug`VYgcbXYfg`ZØf 9fk`UWk`gYbY`k`]Wk]h[`]ghž`X]Y`VYfi`Z]Wk`i`a`gWk`i`Yb`c`XYf`g]Wk VYfi`Z]Wk`k`Y]hYfYbhk]W`_Y`b`a`ØWk`hYb"

Ni`gÅhn`]Wk`gYhnh`X]Y`GhUXh`Ui`Z`X]Y` : ØfXYfi`b[`j`cb`Gdcfh`i`bX : fY]nY]hU`_hj]]hÅhYbž`k]Y`XYb`<Ø\`YfZYgh`Ui`Zž`i`a`Y]b[`Ygi`bXYgi`bX U`_hj] Yg`@YVYbgi`a`ZY`X`ni`gWk`UZZYb"Gc`WkY`ϕ]h]Uh]j`Yb`hfU[Yb b]Wkh`bi`f`ni`f`d`mg]gWk`Yb`; Ygi`bX\Y]h`XYf`6Øf[Yf`VY]ž`gcbXYfb ZØfXYfb`Ui`Wk`[Ya`Y]bgWk`UZh]WkY`6]bXi`b[Yb`Xi`fWk`[Ya`Y]bgUa`Y 5_hj]]hÅhYb`i`bX`gdcfh`]WkY`<YfUi`gZc`fXYfi`b[Yb"

K]fhgWk`UZh`]Wk`Y`5`gd`Y`_hY`XYf`F`Y[`]c`b

8]Y`k`]fhgWk`UZh`]WkY`G]hi`Uh]cb`]b`; YfU`]gh`Xi`fWk`Y]bYb`A`I`Ui`g hfUX]h]cbY`Yb`ϕXi`ghf]Yb`i`bX`a`cXYfbYb 8]Ybgh`Y]ghi`b[`gUb[YVchYb`[YdfÅ[`h"J`cf`U`Ya`_`Y]bY`i`bX`a`]hh`YfY I`bhYfbY\`a`Yb`fP`A`I`Ł`V]`XYb`XUg`F`ØW`[fUh`XYf`c`_U`Yb`K`]fhgWk`UZh" 8]Y`GhUXh`ZØfXYfh`U`_hj] `X]Y`5bg]YX`i`b[`bYi`Yf`I`bhYfbY\`a`Yb`i`bX

i bhYfghØhnh'GhUfh!i dgž'k Ug'X]Y'k]fhgWk UZh'Wk Y'8]j Yfg]Z]n]Yfi b[
j cfUbhFY]Vh"

8]Y' ðj Ygh]h]cbYb']b' X]Y'6]`Xi b['i bX' ðZfUghfi _hi fž'k]Y']b' XYb
GWk i `WJa di g']b' A ØbWk YbVYfbgXcfZž'g]bX'HY]'Y]bYf'`Ub[Zf]gh][Yb
GhfUhY[]Yž'i a `X]Y'k]fhgWk UZh'Wk Y'5hhfU_h]j]hÅh'XYf'FY[]cb'ni
ghY][Yfb'"8]YgY' ðZfUghfi _hi fa U» bU\ a Yb'gWk UZZYb']b'Wk h'bi f
5fVY]hgd`ÅhnYž'gcbXYfb'n]Y\Yb'Ui Wk : Ua]']Yb' i bX'† b[Y
A YbgWk Yb']b' X]Y'FY[]cbž'k Ug'g]Wk `dcg]h]j 'Ui Z'XUg'`c_U`Y
K]fhgWk UZh'gk UWk ghi a `Ui gk]f_Yb' _Ubb"

8 Ya c [fUZ]gWk Y'9bhk]W_`i b [`]b' ; YfU

8]Y'XYa c [fUZ]gWk Y'9bhk]W_`i b [`]b' ; YfU'nY][h'6YgcbXYf\Y]hYbž
X]Y'gck c\`<YfUi gZcfXYfi b[Yb'U'g'Ui Wk `7\UbWb'V]YhYb'"8]Y
GhUXh'\Uhž'k]Y'j]Y'Y'FY[]cbYb']b'8Yi hgWk `UbXž'a]h'XYa
XYa c [fUZ]gWk Yb'K UbXY`ni ` _Åa dZYbž'XYf' `]bdi h
a YWk Ub]ga Yb'ni `Y]bYa `U'Xf]b'UhfhU_h]j Yb'VYcVUWk hYb'XYf'`a \
]a `YhnhYb'WJa i g'U' ` "8]Y'5`hYfi b[`XYf
6Yj Ò`_Yfi b[`YfZcfXYfh'Y]bY'5bdUggi b[`XYf'gcn]U`Yb
8]Ybgh`Y]ghi b[Yb' i bX'Y]bY'j YfghÅf_hY' ðhY[fUh]cb'j cb'Øb[YfYb
; YbYfUh]cbYb"

I a `XYa `Ybh[Y[Ybni k]f_Ybž'gYhnh'X]Y'GhUXh'Ui Z'Dfc[fUa a Y'ni f
: Ua]']YbZØfXYfi b['i bX'† [YbX']Wk Yb' ð_`i g]cbž'i a `]bgVYgcbXYfY
† b[Y`A YbgWk Yb'ni `Yfa i h][Ybž']b'XYf'GhUXh'ni `V`Y]VYb'cXYf
ni fØW_ni _Y\fyb'"8i fWk `5bfY]nY'k]Y'K c\bfUi a ZØfXYfi b['i bX'X]Y
GWk UZZ b['j cb': fY]nY]hUb[YVchYb'gc`Yb'; YfU'i bX'XUg' i a `UbX
UhfhU_h]j `ZØf': Ua]']Yb' i bX'† b[Y'6Yfi ZghÅh][Y'V`Y]VYb"

8 YhU]`g

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