

8]Y`UhYa VYfUi VYbXYb`?`]ddYb`j`cb A c\Yf

9bhXYW_Yb`G]Y`X]Y`?`]ddYb`j`cb`A`c`\Yf.`Y]b`VYY]bXfi`W_YbXYg
BUhi`fk`i`bXYfž`fY]W`Ub` ;`YgW`]W`hYž`A`m\Yb`i`bX`dFU_h]gW`Yb
6Ygi`W`Yfh]ddg"



GhY`X]f`j`cfž`Xi`ghY\gh`Ua`F`UbX`Y]bYg`XYf`VYY]bXfi`W_YbXghYb
BUhi`fk`i`bXYf`f`UbXg`X`Yb`?`]ddYb`j`cb`A`c`\Yf`8Yf`K`]bX`k`Y`h`X]f`
]bg` ;`Yg]W`hž`k`A`fYbX`X]Y`K`Y`Yb`XYg`5h`Ubh]_g`hcgYbX`[`Y`[`Yb`X]Y
ØVYf`&\$`\$`A`YhYf`\c\Yb`GhY]`_ØghYb`_fUW`Yb`9]b`5bV`]W`ž`XYf`b]W`h
bi`f`X]Y`5i`[`Ybž`gcbXYfb`Ui`W`X]Y`GY`Y`VYfØ`fh`<`]Yfž`k`c`X]Y
;`fYbnY`nk`]gW`Yb`<`]a`a`Y`i`bX`9fXY`j`YfgW`k`]a`a`hž`VY`[`]bbh`Y]b
5VYbhYi`Yfž`XUg`XY]bY`J`cfghY`i`b`[`g`_fUZh`gdFYb`[`Yb`k`]fX"

⊖`X]YgYa`5fh]_Y`bY\`a`Yb`k`]f`X]W`a`]h`Ui`Z`Y]bY`F`Y]gY`ni`X]YgYa
a`U`[`]gW`Yb`C`fh`9bhXYW_Y`X]Y`i`fU`hYb` ;`YgW`]W`hYb`i`bX`A`m\Yb`ž
X]Y`g]W`i`a`X]Y`?`]ddYb`fUb_Ybž`i`bX`Ugg`X]W`j`cb`XYf`_i`hi`fY`Yb
J`]Y`ZU`h`XYf`FY`[`]cb`j`YfnUi`VYfb`5i`»`YfXYa`[`YVYb`k`]f`X]f`
dfU_h]gW`Y`H]ddgž`XUa`]h`XY]b`6Ygi`W`Y]b`i`bj`Yf`[`Ygg`]W`Yg
9f`YVb]g`k`]fX`j`ca`VYghYb`5i`gg]W`hgd`i`b`_h`V]g`ni`X`Yb

X]Y`@UbXgWk UZh`k]Y`Y]b` ; Ya `À`XY`YfgWkY]bYb``Àggh"

9]b`k Y]hYfYg`<][`\\][`\\h`]gh`XYf`²`_ca`cb]hcf]b[`!Hi`fa`ž`j`cb`XYa`Xi`
Y]bYb`i`bj`Yf[`Ygg`]WkYb`6`]W_`ØVYf`X]Y`[`YgUa`hY`?`ØghYb`]b]Y`\\Ugh`
8Yf`@Àfa`XYf`BUhi`f`i`bX`XUg`FUi`gWkYb`XYf`K`Y`Yb`gcf[`Yb`ZØf`
Y]bY`a`YX]hUh]j`Y`5ha`cgd`ÀfYž`k`À`fYbX`Xi`X]Y`GWk`Øb`\\Y]h`i`a`X]Wk`
\\Yfi`a`Ui`Zb]a`a`gh`9g`]gh`_Y]b`K`i`bXYfž`XUgg`X]Y`?`ddYb`j`cb`
A`c`\\Yf`\\Ài`Z][`U`g`Y]bYg`XYf`gWk`ØbghYb`:`chca`ch]j`Y`≠`UbXg`
Ub[`YgY`\\Yb`k`YfXYb"

8]Y`:`UfVYb`XYg`A`YYfYg`i`bX`XYg`<]a`a`Y`g`j`YfgWka`Y`nYb`\\]Yf`Ui`Z`
ZUgn]b]YfYbXY`K`Y]gYž`i`bX`X]Y`gWk]a`a`YfbXYb` ;]gWk`h`_`fcbYbž`X]Y`
Xi`fWk`X]Y`K`Y`Yb`YfnYi`[`h`k`YfXYbž`j`Yf`Y]`\\Yb`XYa`C`fh`Y]b`ZUgh`
a`mgh]gWkYg`:`U]f`>XYf`GWk`f]h`h`Ui`ZXYa`DZUX`Vf]b[`h`bYi`Y`K`i`bXYf`
ni`a`J`cfgWkY]b`i`bX`Àggh`X]Y`G]bbY`h`UbnYb`"K`Ybb`Xi`X]Wk`Ui`Z`
X]YgY`F`Y]gY`ni`XYb`?`ddYb`VY[`]Vghž`XUbb`gY]`VYfY]hž`j`cb`XYf`
i`bVÀbX][`Yb`GWk`Øb`\\Y]h`XYg`C`fh`Yg`j`YfnUi`VYfh`ni`k`YfXYb`XYbb`]b`
XYb`?`ddYb`j`cb`A`c`\\Yf`hf]Zh`X]Y`K`]X`\\Y]h`XYf`BUhi`f`Ui`ZX]Y`Gh]`Y`
XYg`5i`[`YbV`]W_g"

5i`Z`XYb`Gdi`fYb`XYf` ; YgWk`]Wk`hY.`?`i`hi`f`i`bX`
A`mh`\\Yb`fi`bX`i`a`X]Y`?`ddYb`j`cb`A`c`\\Yf`

8]Y`?`ddYb`j`cb`A`c`\\Yf`g]bX`b]Wk`h`bi`f`Y]b`UhYa`VYfUi`VYbXYg`
BUhi`fd`\\Àbca`Ybž`gcbXYfb`Ui`Wk`Y]b`GWk`Ui`d`Uhm`fY]WkYf`
 ; YgWk`]Wk`hY`i`bX`ZYggY`bXYf`A`mh`\\Yb`"8]YgY`VYY]bXfi`W_YbXYb`
GhY]`k`ÀbXYž`X]Y`g]Wk`ØVYf`&\$`\$`A`YhYf`ØVYf`XYb`5h`Ubh]gWkYb`
C`nYUb`Yf`\\VYbž`g]bX`gY]h`\\f`\\i`bXYfhYb`b`gd]fUh]cb`ZØf`F`Y]gYbXYž`
 ; YgWk`]Wk`hY`bYfn`À`Yf`i`bX`8]Wk`hYf`<]Yfž`k`c`X]Y`9`Ya`YbhY`
Ui`ZY]bUbXYfd`fU`Ybž`k`YVh`X]Y`j]gWkY`?`i`hi`f` ; YgWk`]Wk`hY`bž`X]Y`h]YZ`
]b`XYf`J`Yf[`Ub[`Yb`\\Y]h]j`Yfk`i`fnY`h]g]bX"

K`Ybb`a`Ub`ØVYf`X]Y`?`ddYb`k`UbXYfhž`gdØfh`a`Ub`gc`Zc`fh`X]Y`
DfÀgYbn`j`Yf[`Ub[`YbYf`NY]hYb`"8]Y` , VYffYghY`XYg`h]YZ`]b`X]Y`:`Y`gYb`
[`Y`\\Ui`YbYb`Hi`fa`Ygž`XYg`C`6f]Yb`g`Hck`Yfž`Yf]bbYfb`Ub`X]Y`J`]g]cb`
j`cb`G]f`7`cfbY`ji`g`C`6f]Ybž`Y]bYa`c`_U`VY`_UbbhYb`Dc`]h_]Yf`i`bX`
@UbXVYg]hnYf`Ui`g`XYa`%-`" :\\f`\\i`bXYfh`9f`]Y»`XYb`Hi`fa`%`,`)`
YfVUi`Ybž`i`a`XYb`6Ygi`WkYfb`Y]bY`gdY`_hU`_i`ÀfY`5i`gg]Wk`h`ni`

Yfa Ò[`]WXYb" < Yi hY`V]YhYhXYf`Hi fa `b]W h`bi f`Y]b][Y`XYf`VYghYb
6`]W_k]b_Y`Ui ZXUg`A Yfž`gcbXYfb`YfnÀ`h`Ui W`j cb`XYf`h]YZYb
J YfVi bXYb`Y]h`XYf`A YbgWXYb`a]h`X]YgYf`fUi Yb`?ØghY"

A m`c`c[]gW`g]bX`X]Y`?`]ddYb`b]W h`a]bXYf`]bhYfYggUbh" `b`XYf
]f]gWXYb` : c`_`cFY` [Y`hYb`g]Y`U`g`<Y]a UhXYg`a `AW h][Yb`8fi]XYb
7Ö`7`i`U]bb`i bX`U`g`GW Ui d`Uhn`XYg`gU[Yb`UZhYb`?Ua`dZYg
nk]gWXYb`XYb`9`ZYb`i bX`XYb`A YbgWXYb`"@Ui h`XYa`U`hYb` ; `Ui VYb
gc`Yb`X]Y`?`]ddYb`j cb`A c`Yf`XUg`Hcf`ni`Y]bYf`UbXYfYb`K`Y`h`gY]bž
k c`X]Y`GY`Yb`XYf`J YfghcfVYbYb`Xi fW`XUg`K`UggYf`fY]gYb"
5i » YfXYa`gU[h`a Ubž`XUgg`g]Y`i bhYf`XYa`GW`i hn`XYg`GY`_`Y`ž
Y]bYf`a mgh]gWXYb`?fYUhi fž`ghY`Ybž`X]Y`X]Y` : À`][_Y]h`U`hž
nk]gWXYb`XYb`K`Y`hYb`XYf`A YbgWXYb`i bX`XYf`C nYUbY`ni`k UbXY`b`"
Gc`WY` ; YgW]W hYb`ZYggY`b`X]Y` : UbhUg]Y`i bX`j Yf`Y`\Yb`XYa
5i ZYbh`U`h`Ub`XYb`?`]ddYb`Y]bY`a mgh]gWXY`5i fU"

6Ygi WXYf`XYf`?`]ddYb`UVYb`X]Y`A Ò[`]W`_Y]hž]b`X]YgY
 ; YgW]W hYb`Y]bni hUi WXYb`i bX`g]W`j cb`XYf`<]ghcf]Y`XYf`FY[]cb
]bgd]f]YfYb`ni`UggYb`"8 Ug`6Ygi WXYfnYbhfi a ž`XUg`a]hY]bYa
a cXYfbYb`8Yg][b`Ufa`cb]gW`]b`X]Y`@UbXgW`UZhY]b[YdUggh]ghž
V]YhYh`b]W h`bi f`]bZcfa`Uh]j Y`5i gghY`i b[Yb`ØVYf`X]Y`BUhi`fi`bX
 ; Yc`c[]Y`XYf`?`]ddYbž`gcbXYfb`Ui W`Y]bYb`9]bV`]W`]b`X]Y`c`_`U`Y
?i`hi`f`<]Yf`_`Ubb`a`Ub`Ui`Z]bhYfU`_h]j`Y`K`Y]gY`YfZU`fYbž`k`]Y`X]Y
?`]ddYb`]a`@Ui`ZY`XYf`X`f`i`bXYfhY`j`cb`j`YfgW]YXYbYb`Gh`A`a`Yb
i`bX`?i`hi`fYb`k`U`f[Ybca`a`Yb`k`i`fXYb"

I b[YUW hYh`XYf`NY]h`]gh`Yg`X]Y`J YfV]bXi b[`nk]gWXYb`A YbgW`i bX
BUhi`fž`X]Y`X]Y`?`]ddYb`j cb`A c`Yf`gc`VYgcbXYfg`a`UW`h`6Y]Y]bYa
GdUn]Yf[Ub[`Ybh`Ub[`XYf`K`UbXYfk`Y[Y`[]Vh`Yg`i`bn`À`][Y
 ; Y`Y[Yb`Y]hYbž`X]Y`_fUZh`c`Yb`K`Y`Yb`i bX`XUg`F`Ui`gWXYb`XYg
K`]bXYg`ni`[Yb]Y» Ybž`k`À`fYbX`a`Ub`g]W`]b`X]Y`?Ua`a`Yf`X]YgYf
`VYbX][Yb` ; YgW]W hY`i bX`XYf`fY]W`U`h][Yb`A`m`h`Yb`j`Yfh]Y`Zh"
8 Ug` ; YZ`X`ž`Xi`fW`X]Y` : i » ghUdZYb`XYf` ; YbYfUh]cbYb`ni`[Y`Ybž
j`Yf`Y`\h`X]YgYf`fY]gY`Y]bYb`Y]bn][Ufh][Yb`NUi`VYfž`XYb`a`Ub`gc
gW`bY`b]W`h`j`Yf[]ggh"

5VYbhYi Yf`5`dYbV`]W`_`DfU`_h]gWXY`H]ddg`ZØf
XYb`dYfZY`_hYb`6Ygi W`Ub`XYb`?`]ddYb

8]Y'?'`ddYb'j cb'A c\Yf'g]bX'Y]b'UhYa VYfUi VYbXYg'B Uhi fk i bXYfž
XUg'YXYg'`U\fhUi gYbXY'6Ygi WYf'Ubn]Y\h"l a 'g]WYfni ghY`Ybž
XUgg'XY]b'6Ygi W'ni 'Y]bYa 'i bj Yf[Ygg]WYb'9f'YVb]g'k]fXž[]Vh
Yg'Y]b][Y'dfU_h]gWY'H]ddgž'X]Y'X]f'\Y'ZYbž'X]Y'a UYghÅh]gWYb
5i gV`W_Y'i bX'X]Y'Y]bn][Ufh][Y'5ha cgd\ÅfY']b'j c`Yb'NØ[Yb'ni
[Yb]Y»Yb"

- 5bfY]gY. '8]Y'?'`ddYb'j cb'A c\Yf'VYZ]bXYb'g]W'Ub'XYf
K Ygh_ØghY'`f'UbXg'i bX'g]bX'Ua 'VYghYb'a]h'XYa '5i hc'ni
YffY]WYb"J cb'8i V`b'Ui 'g]gh'X]Y': U\fh'Yhk U'XfY]'Ghi bXYb
'Ub["'5'hYfbUh]j '_Ubbgh'Xi 'Ui W'Y]bYb'6i g'j cb'; U'k Um
bY\ a Ybž'XYf'X]W'X]fY_h'ni 'X]YgYa 'gdY_hU_i 'ÅfYb'C fh
Vf]b[h"J Yf[]gg'b]W hž'X]Y'fUi 'Y'f]gWY '@UbXgW UZh'ni
[Yb]Y»Ybž'k Å\ fYbX'Xi 'i bhYfk Y[g'V]gh"
- ² ZZbi b[gnY]hYb. '8]Y'?'`ddYb'g]bX' [Ubn'Å\ f][
ni [Åb[`]W žk cVY]X]Y'6Ygi WYfgU]gcb'nk]gWYb'5df]'i bX
GYdhYa VYf'UbghY][h"l a 'XYb'A YbgWYba Yb[Yb'ni
Ybh_ca a Yb'i bX'XUg'fi \][Y'; YZØ\`XYf'B Uhi f'ni 'Yf'YVYbž
d'UbY'XY]bYb'6Ygi W'ZfØ\ a cf[Ybg'cXYf'gdÅhYf'Ua
5VYbX"8Yf'GcbbYbUi Z[Ub['i bX'GcbbYbi bhYf[Ub['V]YhYb
X]f'ni XYa 'i bj Yf[Ygg]WY': chca Ò[`]W_Y]hYb"
- 5i gfØghi b[. '9]b' [i hYg'DUUF'K UbXYfgW'i \Y']gh
i bYf'Ågg]W ž'XYbb'X]Y'K UbXYfk Y[Y'Ybh'Ub['XYf'?'`ddYb
_ØbbYb'i bYVYb'gY]b"DUW_Y'Ui W'Y]bYb'k UggYfX]W hYb
FY[Yba UbhY`Y]bž'XYbb'XUg'K YhhYf'_Ubb']b'`f'UbX'gW bY`
i a gW`U[Yb' J Yf[]gg'b]W hž'XY]bY'?Ua YfU'a]hni bY\ a Ybž
i a 'X]Y'VYY]bXfi W_YbXYb'5i gV`W_Y'ZYghni \U'hYb' 'X]Y
'?'`ddYb'Yf\YVYb'g]W'V]g'ni '&%('A YhYf'ØVYf'XYa
5h'Ubh]gWYb'C nYUb"
- GbUW_!NY]h. '6f]b['X]f'Y]b'D]W_b]W_a]hž'XYbb'Ui Z'XYf
5i gg]W hgd`UhhZcfa ' []Vh'Yg'k Yb][; Ughfcbca]Y"GYhnY
X]W]b'X]Y'K]YgYž[Yb]Y»Y'XY]bYb'GbUW_'i bX'Ui gWY
XYa 'VYfi \][YbXYb'FUi gWYb'XYf'K Y`Yb' 'Y]b'dYfZY_hYf
A ca Ybhž'i a 'X]Y'GY'Y'VUi a Y'b'ni 'UggYb"
- 9f_i bXY'X]Y' l a [YVi b[. '8]Y'?'`ddYb'j cb'A c\Yf'g]bX
bi f'XYf'5bZUb["'`b'XYf'bÅ\YfYb'l a [YVi b[[]Vh'Yg
nU\`fY]WY'K UbXYfk Y[Yž'X]Y'X]W'Xi fW'X]Y
VYY]bXfi W_YbXY '@UbXgW UZh'ZØ\ fYb" < U'hY'5i ggWUi 'bUW

XYa`_`Y]bYbžj YfghYW_hYb`@Yi W\hhi fa`j cb`C`6f]Yb g
Hck Yf`cXYf`VYgi W\Y`XUg`6Ygi W\YfnYbhfi a ži a`a Y\ f
ØVYf`X]Y`[Yc`c[]gW\Y` ; YgW\]W\hY`i bX`X]Y`H]Yfk Y`h`XYf
FY[]cb`ni`YfZU\ fYb`

⇒XYa`Xi`X]YgY`Y]bZUW\Yb`H]ddg`VYZc`[ghž`k`]fX`XY]b`6Ygi W`Ub
XYb`?`]ddYb`j`cb`A`c`Yf`ni`Y]bYa`i`bj`Yf[Ygg`]W\Yb`5VYbhYi`Yfž
XUg`X]W\`ZØf`]a`a`Yf`VY[`Y]hYb`k`]fX`"8]Y`J`cfZFYi`XY`ghY][`hž`k`À`fYbX
Xi`Xi`fW`X]Y`nYf`_`ØZhYhY`?`ØghYb`UbXgW\UZh`gW\ fY]hYgh`i`bX`XYf
YfZf]gW\YbXY`K`]bX`]b`XY]bYa` ; Yg]W\h`k`Y`h`A`UW\Y`X]W\`VYfY]hž`]b
X]YgY`a`U[]gW\Y`?`i`]ggY`Y]bni`hUi`W\Yb`°

K`Ybb`Xi`XUg`b`ÅW\ghY`A`U`j`cb` : Yfbk`Y`[YdUW`h`k`]fghž`XYb`_`Ub
X]Y`?`]ddYb`j`cb`A`c`Yf`" <]Yfž`k`c`X]Y`fUi`Y`?`ØghY`Ui`Z`XYb
i`bYbX`]W\Yb`C`nYUb`hf]Zž`gdØfgh`Xi`XYb`K`]bX`XYf` ; YgW\]W\hY`i`bX
X]Y`@Y[YbXYbž`X]Y`]b`XYf`gU`n][Yb`@`Zh`hUbnYb`"@UggY`X]W\
j`YfnUi`VYfb`j`cb`XYf`a`U`Ygh`Åh]gW\Yb`GW\Öb`Y]h`X]YgYf
BUhi`fk`i`bXYf`i`bX`YbhXYW`Y`X]Y`Gdi`fYb`j`Yf[Ub[YbYf`NY]hYb`"
X`XYf`GW\ f]h`Ybh`Ub[`XYf`?`]ddYb`]gh`Y]b`bYi`Yg`5VYbhYi`Yfž`XUg
XUfUi`Z`k`UfhYhž`j`cb`X]f`Yfn`Å`h`ni`k`YfXYb`"DUW`X]Y]bYb`Fi`W`gUW`ž
gW\ bUdd`X]f`XY]bY`?`Ua`YfUi`bX`VYk`Y[Y`X]W\`Ui`Z`XYb`DZUXYbž`X]Y
X]W\`ni`f`Å`W\ghYb`?`]ddY`≠`UbXg`ZØ\ fYb`"8]Y`5i`gg]W\h3
5hYa`VYfUi`VYbX`"8]Y`9f`YVb]ggY3`i`bj`Yf[Ygg`]W\`K`U[Y`XYb
Gdfi`b[`]b`Y]b`i`bVYgW\ fY]V`]W\Yg`9f`YVb]g` `X]Y`?`]ddYb`j`cb`A`c`Yf
Yfk`UfhYb`X]W\`a`]h`c`ZYbYb`5fa`Yb`°

8YhU]`g

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