

%* ` \ Ägg`]Wk Y ; YVÄi XYž`X]Y`]Wk `Y][Ybh`]Wk
`]YVY

⇒Wk ` \ UVY`gWkcb`ZfØ\Yf`j`cb`a`Y]bYf`HY]`nY]h`]YVY`ni`f`
5fWk]hY`_hi`f`[`YgdfcWkYb`"⇒Wk`VYk`i`bXYfY`cZZYb` ;`ch]`_i`bX`
‡`[`YbXgh]`ž`UVYf`]bg[`Y\Y]a` ` \ UVY`]Wk`6fi`hU`]ga`i`g`gWkcb`
]a`a`Yf`[`Y`]YVh`"⇒Wk`gU[`Y` ` \ Y]a` `]Wk` ž`k`Y]`Vfi`hU`]gh]gWkY`
 ;`YVÄi`XY` \ Ägg`]Wk`g]bX` `Yfbgh\UZh` \ Ägg`]Wk` `UVYf`Yg`[`]Vh`
Ui`Wk`Y]bY`XØghYfY`i`bX`Y]bXf]b[`]WkY`GWk`Öb` \ Y]h]ba`]hYb`XYf`
 <Ägg`]Wk`_Y]h`<`]Yf`g]bX`a`Y]bY`@YV`]b[`gVUi`hYb`XYg`
6fi`hU`]ga`i`g`f`a`UbWka`U`Ui`Wk`U`g` \ Ägg`]WkY` ;`YVÄi`XY`
VY`_Ubbh`U`i`g`XYf`[`Ubnyb`K`Y`h`"⇒`a` `5` `[`Ya`Y]bYb` \ UVY`]Wk`
6`]XYf`Ui`g`K`_]dYX]U`[`Yni`dZhž`UbghUhh`_i`bghj`c`Yž`[`YZ]`hYfhY`
5i`ZbU` \ a`Yb`Ui`g`i`b`_cbj`Ybh]cbY`Yb`K`]b`_Y`b`ni`j`Yfk`YbXYbž`
XUa`]h]Wk`XYb`k`U`fYb`GWk`fYW`_Yb`X]YgYf`Ghfi`_hi`fYb`nY][`Yb`
_Ubb`"GU[`a`]fž`k`Ug`]Wk`]b`XYb`?ca`a`YbhUfYb`i`bhYb`
j`YfdUggh` \ UVY`"/`Ua`d` \ Y`]d/`

⇒Wk ` \ UVY`gWkcb`ZfØ\Yf`j`cb`a`Y]bYf`HY]`nY]h`]YVY`ni`f`5fWk]hY`_hi`f`
[`YgdfcWkYb`"⇒Wk`VYk`i`bXYfY`cZZYb` ;`ch]`_i`bX`‡`[`YbXgh]`ž`UVYf`
]bg[`Y\Y]a` ` \ UVY`]Wk`6fi`hU`]ga`i`g`gWkcb`]a`a`Yf`[`Y`]YVh`"

⇒Wk`gU[`Y` ` \ Y]a` `]Wk` ž`k`Y]`Vfi`hU`]gh]gWkY` ;`YVÄi`XY` \ Ägg`]Wk`g]bX`
Yfbgh\UZh` \ Ägg`]Wk` `UVYf`Yg`[`]Vh`Ui`Wk`Y]bY`XØghYfY`i`bX`
Y]bXf]b[`]WkY`GWk`Öb` \ Y]h]ba`]hYb`XYf`<Ägg`]Wk`_Y]h`<`]Yf`g]bX`
a`Y]bY`@YV`]b[`gVUi`hYb`XYg`6fi`hU`]ga`i`g`f`a`UbWka`U`Ui`Wk`U`g`
 \ Ägg`]WkY` ;`YVÄi`XY`VY`_Ubbh`U`i`g`XYf`[`Ubnyb`K`Y`h`"

⇒`a` `5` `[`Ya`Y]bYb` \ UVY`]Wk`6`]XYf`Ui`g`K`_]dYX]U`[`Yni`dZhž`UbghUhh`
_i`bghj`c`Yž`[`YZ]`hYfhY`5i`ZbU` \ a`Yb`Ui`g`i`b`_cbj`Ybh]cbY`Yb`K`]b`_Y`b`
ni`j`Yfk`YbXYbž`XUa`]h]Wk`XYb`k`U`fYb`GWk`fYW`_Yb`X]YgYf`
Ghfi`_hi`fYb`nY][`Yb`_Ubb`"GU[`a`]fž`k`Ug`]Wk`]b`XYb`?ca`a`YbhUfYb`
i`bhYb`j`YfdUggh` \ UVY`"fC`XYf`bYbbYb`G]Y`a`]Wk`Y]bYb`Gd]Y`Yf`c` \ bY`
Y`[`]WkYb` ;`YgWka`UW`"Ł`

%"6U`Zfcb`Hck Yf`j cb`9fb` ; c`XZ]b[Yfž
@cbXcb

`U`h1 2 f6]`X. `GYVUgh]Ub` : ž7fYUh]j Y`7ca a cbgŁ

9]bY`a Y]bYf`GWk YghYfb`\UhY`j cf`Y]b`dUUf`đ\fyb`XUg
J Yf[b0[Yb`fBŁ]b`XYb`6U`Zfcb`Hck Yfg`ni ``YVYb``9g]gh`a
k]f_]W\Yb`@YVYb`gc`X0ghYf`k]Y`Ui Z`XYf`@Y]bk UbXž`k Yg\U`V
8Ubbm`6cm`Y`Yg`j]Y``Y]W\h]b`gY]bYa` <cffcZ]`a`&, `8Umg`@UhYf
j Yfk YbXYh`\Uh"

; c`XZ]b[Yfž`XYf`Ui W\`HfY``]W_`Hck Yf`i bX`6fck bZ]Y`X`9ghUhY
Ybhk cfZYb`\Uhž`k Uf`X]Y`đgd]fUh]cb`XYg`5i hcfg`đUb` : `Ya]b[`Z0f
XYb`đJa Yg]6cbX!60gYk]W\h`5i f]W; c`XZ]b[Yf``5bgW\Y]bYbX
_cbgi `h]YfhY`XYf`YW\hY` ; c`XZ]b[Yf`gY]bY`5bk `À`hYž`U`g` ; c`XZ]b[Yf
%-) - j Yf0ZYbh]W\h`k i fXY`fk Ug` : `Ya]b[`XUni` j YfUb`UgghYž`ni
Xfc\Ybž`X]Y` :][i f]b` ; c`Xdf]W_` i a ni VYbYbbYbŁž`YbhgW\]YX`g]W\
YXcW\ž`b]W\h`ni `_`U[Yb"

: `Ya]b[g]J Yf`Y[Yf`Yf_`ÀfhYb`g]W\`VYfY]hž`X]Y`5bk U`hg_cghYb`j cb
; c`XZ]b[Yf`ni `0VYfbY\`a Ybž`i bX`[UVYb`]\`a`gYW\g`_cghYb`cgy
9I Ya d`UfY`XYg`6i W\Yg"

&"`%\$&`?` `Y]bZfUb`_fY]W\`j cb`G]f`6Ug]`GdYbW\ž
@cbXcb

`U`h1 2 f6]`X. `GhYd\Yb`F]W\UfXž7fYUh]j Y`7ca a cbgŁ

8]YgYg`60fc[YVÀi XY`]b`K Ygha]bghYf`k Uf`nk]gW\Yb`%- +, `i bX
&\$\$(`XYf`<Ui dhghUbXcfh`XYg`Vf]h]gW\Yb`đbYba]b]ghYf]i a g``GY]b
GW\0dZYfž`G]f`6Ug]`GdYbW\ž`k i fXY`gY]hXYa`VYgW\i`X][`hž`XYb`Gh`
đJa Yg`DUf`_`a]h`gY]bYa` \cW\`Ui ZfU[YbXYb`?c`cgg`fi]b]Yfh`ni
\UVYb"

' ``@YVYbgfUi a` * +`j cb`A cg\Y`GUZX]Yž

A c b h f Y U`

`U`h1 @YVYbgfUi a 2 f6]`X. `J Ugg[Yf[Y`mž`7fYUhj Y`7ca a cbgŁ

8]YgYf`k Y]h`Ai Z[Y`?ca d`YI `k i fXY`Ybhk cfZYbž`i a `X]Y`J cfnØ[Y
XYg`J c fghUXh`YVYbg`fl `ÀfhYbž`Zf]gW`Y`@ Zhi bX`Df]j Uhg d`ÀfYŁ`a]h
XYf`K]fhgW`UZh]W`_Y]hi bX`8]W`hY`Y]bYg`A Y`fZUa]`Yb`U`i gYg`ni
_ca V]b]YfYb`" < Yi hY`Y]b`UfW`]hY`_hc b]gW`Yg`K U`fnY]W`Ybž`g]bX
gY]bY`5dUfha Ybhg`Ài » Yfgh`VY[Y`fh"

("`F cVUfhg`@]VfUfmj`c b`A Uh`Yfg`/ ` < U`XYbVm
5 fW`]hY`Wgž`Hc f c b hc

`U`h1 `F cVUfhg` 2 f6]`X. `8f`? "ž`7fYUhj Y`7ca a cbgŁ

8]Y`[Y]ghYg!`i bX`gc n]U`k]ggYbgW`UZh]W`Y`6]V`]ch`Y`_`XYf
l b]j Yfg]hmcZ`Hcfc bhc`Ybh`À`h`ia Y`f`U`g`(`ž` `A]`]cbYb`6ØW`Yf`]b
6i W`Zcfa ž`(`ž`%`A]`]cbYb`A]_fcZcfa Yb`i bX`+(`\$`\$\$\$`UbXYfY
6ØW`Yfž`k Ug`]f`XYb`BUa Yb`i : cfh`6cc_`Y]bVfUW`hY"

) "`; Y]gY``@]VfUfmj`c b`K]``]Ua `@"`DYfY]fU`/
5 ggc W]UhYgž`GUb`8]Y[c

`U`h1 ` 2 f6]`X. `5bhc]bY`HUj YbYUi l ž`7fYUhj Y`7ca a cbgŁ

8]Y`; Y]gY`!6]V`]ch`Y`_`XYf`l b]j Yfg]hmcZ`7U]Zc fb]U`U`h`X]Y`i bhYfYb
GhcW`_k Yf`_Y`a]h`XYb`Bi a a Yfb`%`i bX`&`i bX`X]Y`cVYfYb
GhcW`_k Yf`_Y`a]h`XYb`Bi a a Yfb`(`V]g`, ž`k Ug`ni`a Y`fYfYb
H`Ycf]Yb`XUfØVYf`ZØ`fhž`k Ufi a `XYf`Xf]hhY`GhcW`_UV[Yf]Y[Y`h]gh"
8]Y`dcdi `ÀfghY`H`Ycf]Y`VYgU[hž`XUgg`X]Y`8Yg][bYf`XUg`a Ø[`]W`Y
; Yk]W`h`XYf`6ØW`Yf`b]W`h`VYfØW`_g]W`h][h`U`hYbž`gcXUgg`XYf
Xf]hhY`GhcW`_Ui g`B`chk YbX][_Y]h`YYf`[Y`UggYb`k i fXY"

* "`Hf]W`cfb`7YbhYf`j`c b`C`k`Yb`@`XYf`i`b`X
F`c`X`b`Y`m`i`;`c`f`X`c`b`ž`D`c`f`h`g`a`c`i`h`

U`h1 2 f6]X. : ccZmž7fYUhj Y`7ca a cbgŁ

8 Ug`&\$\$(`UV[Yf]ggYbY`Hf]Wc fb`7YbhYf`k Uf`VYa Yf`Ybgk Yfhž`k Y]`
Yg`Y]bYb`XYf`YfghYb`J]f[]b`A Y[UghcfYg`gck]Y`X]Y`[fÒ» hY`@UgYf`
E i Ygh!5fYbU`]b`9i fcdU`VY\YfVYf[hY" <Yi hY`ghY\h`Ub`gY]bYf`GhY`Y`
Y]b`DUf_d`Uhm` k Ug`Y][Ybh`]W`U`Yg`gU[hž`k Ug`a Ub`ØVYf`
Dcfhga ci h\`k]ggYb`a i gg"

+ "`F cV]b`< ccX` ; UfXYbg`j cb`5`]gcb`i bX`
DYhYf`Ga]h\gcbž`@cbXcb

U`h1 2 f6]X. `GhYj Y`7UXa Ubž7fYUhj Y`7ca a cbgŁ

8]YgY` ; Ya Y]bXYg]YX`i b[`fhi gUa` a Yb`a]h`XYb`VYfY]hg`Yfk Å\bhYb`
6U`Zfcb`Hck YfgŁ`nY][hž`k Ufi`a`]W`a Y]bYb`<Y]a UhVYn]f`_Hck Yf`
<Ua`Yhg`gc`gY`f`]YVY. `9f`]gh`Ågg`]W`žUVYf`j c`Yf`7`UfU`hYf`
@Y]XYf`Xi fW`Ui ZYb`X]YgY` ; ÅfhYb`Y`hnh`Y]bY` GUb]Yfi b[gd`UgY` ž`
gcXUgg`g]Y`a Ò[`]W`Yfk Y]gY`Ui W`U`g`DUf_d`Uhm`YbXYb"

, "`A Uf]bU`7]hmj cb`6YfhfUbX` ; c`XVYf[ž`
7`]WU[c

U`h1 2 f6]X. `5g\`Ym`7fi a ž7fYUhj Y`7ca a cbgŁ

8]YgY`*) !ghÒW_] [Yb`HØfa Y`gc`Yb`Y]b`K c\`b!`i bX` ; Yk YfVYcV`Y`_h`
gY]bžUVYf`Yg`g]bX`X]Y`[YdUf`hYb`5i hcgž`X]Y`≠fY`5i Za Yf`gUa`_Y]h`
Ui Zg]W`n]Y\Yb`i bX`X]Y` ; YVÅi XY`k]Y`*) !ghÒW_] [Y`DUf`_Åi gYf`
Ui ggY\Yb`UggYb`"HfchnXYa`g]bX`g]Y`n]Ya`]W`VYY]bXfi W`YbX`
[YbUi`k]Y`XYf`F`Ygh`j cb`7`]WU[c"

- "`Hc ffY`J Y`UgWU`j cb`66DF ž`A U]`UbX`

U`h1 2 f6]X. `8Uj]X`C fVUbž7fYUhj Y`7ca a cbgŁ

8]YgYg`6Y]gd]Y` a cXYfbYf`hU`]Yb]gW`Yf`5fW`]hY`_hi`f`a`]h`gY]bYb`
Vfi hU`]gh]gW`Yb`NØ[Yb`VY\YfVYf[h`Y]bY`A`]gW`i b[`Ui`g`K`c\`b!`i bX`
 ; Yk YfVYY]b`Y]hYb`"CVk`c`\`Yg`g]W`Yf`]W`Y]b`6`]W`ZUb[`]ghž`ghY\h`

Yg'XYi h]W`ja`K]XYfgdfi W`ni`A U]`UbXg`Fi Z`U`g`Y`Y[UbhY`i bX
gh]j c``Y`GhUXh"

%"`Dc b hY`7]hmi5 d Ufha Y b hg`j c b`A Ub b]Y
: Y`Xa Ub ž`x` \ UbbYgVi f[

`U`h1` 2 f6]`X.`; YcZZfYmi< UbWcW_ž`7fYUh]j Y`7ca a cbgł

8]YgYg`*(!ghÖW_] [Y`nm]bXf]gWY`Y; YVÄi XY`]gh`XYf`\ ÖW ghY
K c`_Yb_fUhnYf`b`5Zf]_U" `9fVUi h`ja` `x\ f`%- +) ž`k Uf`Yg`Y]bY`gY\ f
VY[Y`fhY`5XfYggYž`]gh`UVYf`gY]hXYa`ni`Y]bYa`Gma Vc`ZØf
?f]a]bU`]hÄhi bX`i fVUbYb`J YfZU``[Yk cfXYb" `8Yf`nYbhfU`Y`F Ui a ž
XYf`U`g` ?Yfb`VY_Ubbh`]ghž`gc``hY`ni`gÄhn`]W`Yg`@]W`h`]b`X]Y
K c`bi b[Yb`UggYbž`]gh`UVYf`6Yf]W`hYb`ni`Zc`[Y`Ynh`a`]h`ZUgh`ZØbZ
GhcW_k Yf_Yb`\c`Yb`HfØa`a`Yfb`[YZØ`h"

%%" `F c VYfh`F Uh\ Vi b`K]`gcb`< U``j`cb`5`Ub`< "
F]XYfž`6UhUj]U`fMY]`7\]WU[cł

`U`h1` : chc`j`cb`\Ägg]W`Yb; YVÄi XYb`2 f6]`X.`K`A; c6i Zgž
7fYUh]j Y`7ca a cbgł

8]YgY`Ui » Yf]fX]gWY`Ghfi`_hi`f`]gh`HY]`j`cb`: Yfa`]UVžY]bYa
bUh]cbU`Yb`@UVcfž`XUg`g]W`Ui`Z`<c`W`YbYf[]Y!HY]`W`Ybd`mg]_
gdYn]U`]g]Yfh`\Uhž`k`Ug`k`U`fgW`Y]b`]W`U`Yg`]ghž`k`Ug`]W`
j`YfbØbZh[]Yfk`Y]gY`ni`X]YgYa`H\Ya`U`gU[Yb`_Ubb"

%&" `G\ f]`F Ua`7Yb hYf`j`cb`G\]j`B Uh\`DfUgUXž
B Yi !8Y`\]

`U`h1` 2 f6]`X.`9_UV\]g\Y_ž`7fYUh]j Y`7ca a cbgł

8]YgYg; YVÄi XY`XUg`Ui`gg]Y`hž`U`g`gc``hY`Yg`Y]bY
K]fhgW`UZhgd fØZ`b[g[YgY`gW`UZh`VY`YfVYf[Ybž`X]Y`g]W`Ui`Z`X]Y
, VYfd fØZ`b[`XYf`GhYi`Yfi`bhYf`U[Yb`j`cb`:]bUbnVYfUhi`b[gZ]fa`Yb
gdYn]U`]g]Yfh`\Uh`]gh`Y[Ybh`]W`Y]b`?i`bgh`i`bX`?i`hi`fnYbhf`i`a`ž

XUg`XYa`]bX]gWYb`H\YUHYf`[Yk`]Xa`Yh`]gh" `C ZYbg]W\h`]W`_Ubb`XYf`
GWY]b`hf0[Yb"

%' " `5i` `U`HI` `8Y`Zh`j`cb`J`Ub`XYb`6fcY`_`Yb`
6U`Ya`Už`8Y`Zh`

`U`h1` `5i` `U` 2 f6]`X.`F`]^gX]Ybghj`ccf`\Yh`7i` `hi` fYY`9fZ[cYXž`
7fYUh]j`Y`7ca`a`cbgł`

8]Y`5i` `Už`HY]`XYf`[f0»`hYb`i`bX`À`hYghYb`0ZZYbh`]WYb`hYW\`b]gWYb`
l`b]j`Yfg]hÀ`h`XYf`B`]YXYf`UbXYž`VY\`YfVYf[h`XUg`<`Ui`dhfYghUi`fUbh`
i`bX`XYb`@UXYb`XYf`l`b]j`Yfg]hÀ`h`gck`]Y`<`0fgÀ`Y`i`bX`
J`Yfk`U`hi`b[gV0fcg`XYf`l`b]j`Yfg]hÀ`h`a`X]fY`_hYb`i`Y[YbgUhm`ni`a`
G\`f`F`Ua` `7YbhYf`]gh`Yg`k`Yb][Yf`]bhYfYggUbhž`U`g`Yg`Ui`gg]Y`\`h"

%(" `G9G7`Dca`dÅ]U`j`cb`@]bU`6c`6UfX]ž`J`]`U`
Dca`dY`^]`fMY]`Gč`c`DUi` `cł`

`U`h1` ` 2 f6]`X.`DUi` `]ggcb`A`]i`fUž`7fYUh]j`Y`7ca`a`cbgł`

8]YgYg`NYbhfi`a` `Z0f`?`i` `hi` fi` bX`i` fY]nY]h`gc` ``Gč`c`DUi` `cg`
9]bghY`i`b[`ni` `gY]bYb`j`YfU`hYhYb` `X`i`ghf]Y[YV]YhYb`fYj`c`i`h]cb]Yfh`
\UVYb" `X`mh`a`]h`H\YUHYfž`GWk`]a`a`VUXž`7UZ`hYf]Už`F`YghUi`fUbh`
i`bX`5i`gghY`i`b[gZÀWY`]gh`Yg`k`Y]h`YbhZYfbhj`cb`XYf`i`UggZUVf]_ž`
X]Y`Yg`Zf0\`Yf`k`Uf"

.

%) " `F`Y[]Yfi`b[gnYbhfi`a` `j`cb`C`fUb[Y`7ci`bhm`
j`cb`DUi` `F`i`Xc`d`\ž`BYk`Mcf`_`

`U`h1` ` 2 f6]`X.`8`Ub]Y`7UgYž`7fYUh]j`Y`7ca`a`cbgł`

B`UW`gY]bYa` `6Ui` `]a` `X\`f`%-`*`+`k`i`fXY`X]YgYg`
F`Y[]Yfi`b[g[YVÀi`XY`dfca`dh`U`g` `A`cbghfi`a` `VYnY]W\`bYh" `a` `X\`f`
&`\$`\$`gU[hY`7ci`bhm`9l`YW`h]j`Y`9Xk`UfX`8]UbU.` `K`Ybb`]W`]b`XYf`

GhUXh'Ub`Y]bYf'I a ZfU[Y`hY]`bY\`a Yb`k ØfXYž`k ØfXY`g]Y`a cf[Yb
UV[Yf]ggYb`k YfXYb" `9f`gW\`i [`Y]b`9fgUhn[YVÄi XY`j cfž`UVYf`XYf
@UbX_fY]g`Y[hY`gY]b`J Yhc`[Y[Yb`X]Y`?cghYb`j cb`%%(`A `)]cbYb
8c``Uf`Y]b"

%+ "`GcZ]hY` `Hc_mc`j`cb`?`]mc`b`c`f]`?`_]i`hU`_Yž
Hc_]c

`U`h1` 2`f6]`X.`@cj`Yf`cZ`F`ca`UbWž`7`fYU[h]j`Y`7`ca`a`cbgŁ

8]YgYg`<`chY`ž`Y]bY`?`fYi`ni`b[`nk`]gW\Yb`Y]bYa` `F`Ui`a`gW\]ZZi`bX
;`cXn]`Už`k`i`fXY`&\$\$*`[`YgW\`cggYb`i`bX`\Uh`bi`b`XYb`nk`Y]ZY`\UžhYb
F`i`Zž`XUg`\ÒW\ghY` ;`YVÄi`XY`]b`Hc_]c`ni`gY]bž`XUg`UV[Yf]ggYb`k`]fX"

<]bk`Y]g.`≠W`\UVY`H\Y`6UfV]WU]b`k`Y[[`Y`UggYbž`XU`Yg`b]W\h`gW\Òb!
\Ägg`]W\`]ghž`gcbXYfb`bi`f`\Ägg`]W\!\Ägg`]W`"
"

8YhU]`g

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