

Hc hY ' <]hnY . 'X]Y ' \ Y]» YghYb 'C fhY 'XYf '9fXY

K]f'k YfZYb 'Y]bYb '6`]W_ 'Ui Z'X]Y ' \ Y]» YghYb 'C fhY 'XYf '9fXY 'i bX
k Ug 'Yg 'VfUi W hž'i a 'Xcfh'ni 'ØVYf'YVYb 'K]f'g]bX '[YfUXY 'Ui g
8 U``c``]b 'ÿh\]cd]Yb 'ni fØW_[Y_Y \ fh'i bX '\ UVYb '[YgY \ Ybž'k]Y
gWk Yf'Yg']ghž'Ub 'Y]bYa 'XYf '\ Y]» YghYb 'C fhY 'XYf '9fXY 'ni
ØVYf'YVYb "'8]Y ' \ Y]» YghYb 'C fhY 'XYf '9fXY 'g]bX ']'b'ghÅbX][Yf
6Yk Y[i b["'G]Y 'ÅbXYfb'g]W j cb 'š\ f'ni 'š\ f'i bX 'a]h] \ bYb
ÅbXYfb'g]W '5i ZbU \ a YhYWb]_Ybž'X]Y 'cZn \]bhYfZfU[h'i bX
i a ghf]hYb'g]bX "I bUV \ Åb[]['XUj cb 'hUi W Yb 'X]Y '['Y]W Yb
C fhY 'ja a Yf'k]YXYf'Ui Zž'j]Y 'Y'j cb ']'bYb '\ UVYb 'Å \ b`]W Y
9][YbgW UZhYb "'8]Y ' \ Y]» YghYb 'C fhY 'XYf '9fXY 'g]bX 'ZUgh]ja a Yf
hfcW_Ybž'_Uf[ž'gcb]b]['i bX 'VY \ YfVYf[Yb 'k Yb]['cXYf
/ Ua d \ Y ``]d/

K]f'k YfZYb 'Y]bYb '6`]W_ 'Ui Z'X]Y ' \ Y]» YghYb 'C fhY 'XYf '9fXY 'i bX 'k Ug
Yg 'VfUi W hž'i a 'Xcfh'ni 'ØVYf'YVYb

K]f'g]bX '[YfUXY 'Ui g'8 U``c``]b 'ÿh\]cd]Yb 'ni fØW_[Y_Y \ fh'i bX '\ UVYb
[YgY \ Ybž'k]Y 'gWk Yf'Yg']ghž'Ub 'Y]bYa 'XYf '\ Y]» YghYb 'C fhY 'XYf
9fXY 'ni 'ØVYf'YVYb "

8]Y ' \ Y]» YghYb 'C fhY 'XYf '9fXY 'g]bX ']'b'ghÅbX][Yf'6Yk Y[i b["'G]Y
ÅbXYfb'g]W j cb 'š\ f'ni 'š\ f'i bX 'a]h] \ bYb 'ÅbXYfb'g]W
5i ZbU \ a YhYWb]_Ybž'X]Y 'cZn \]bhYfZfU[h'i bX 'i a ghf]hYb'g]bX "
I bUV \ Åb[]['XUj cb 'hUi W Yb 'X]Y '['Y]W Yb 'C fhY 'ja a Yf'k]YXYf'Ui Zž
j]Y 'Y'j cb ']'bYb '\ UVYb 'Å \ b`]W Y '9][YbgW UZhYb "'8]Y ' \ Y]» YghYb
C fhY 'XYf '9fXY 'g]bX 'ZUgh]ja a Yf'hfcW_Ybž'_Uf[ž'gcb]b]['i bX
VY \ YfVYf[Yb 'k Yb]['cXYf '[Uf'_Y]bY 'J Y[YhUh]cb "

J cb '@]VmYb 'ØVYf'XYb 'fUb 'V]g'bUW '5i ghfU']Yb 'k]fX 'Yg 'Ub 'X]YgYb
C fhYb 'gc '\ Y]» ž'XUgg'cZn'bi f'gY \ f'k Yb][Y 'A YbgW Yb 'Y]bY '9I]ghYbn
VYghfY]hYb '_ØbbYb ' 'i bX 'k Ybbž'XUbb 'Y]bY 'a U[YfY "'K]f

i bhYfgi WXYb`X]Y`5bk ÅfhYf`Ui Z`Y]b][Y`XYf`VY[Y\fhYghYb
=a a cV`])Yb`XYf`K Y`h`X]Y`\Y]» YghYb`C fhY`XYf`9fXY"

8 U`c`ž`ÿ h\]cd]Yb

8 U`c`])b`XYf`8 UbU_]!GYb_Y`]b`ÿ h\]cd]Yb`\Å`h]a a Yf`bcWXYb
cZZ]n]Y`Yb`fY`_cfX`Z0f`X]Y`\0W ghY`8 i fW gW b]hghYa dYfUhi f`Z0f
Y]bYb`VYk c\bhYb`C fh`Ui Z`XYf`9fXY" `Nk]gWXYb`%- *\$`i bX`%- **
Ui Z[YnY]W bYhž`VYhfi [`X]Y`Xi fW gW b]h]WXY`š\ fYghYa dYfUhi f`)
...7`f) `...: Ł"

≠b`XYf`BÅ\Y`VYZ]bXYh`g]W`9fhU`5`Yž`Y]bYf`XYf`U`h] ghYb`J`i`_UbY
XYf`K Y`h`HÅi`gWXYb`G]Y`g]W`b]W`h`8]YgY`FY[]cb`ÿ h\]cd]Ybg`]gh
Y]bYf`XYf`Yi hfYa ghYb`C fhY`XYf`K Y`h"

6 UbXUf!Y`A U\g\U\ fž`=fUb

`U`h1` 8]Y`\Y]» YghYb`C fhY`XYf`9fXYž: U]fi`gY`=fUb` 2`Ub[Uj`UfUb/
: U]fY`Bi`hni`b[`: Ugh` "\$"\$"\$"\$`9]bk c\bYf`YVYb`]b`6UbXUf!Y
A U\g\U\ f

A]h`ZUgh` "\$"\$"\$"\$`9]bk c\bYfb`]gh`X]Y`Dfcj`]bn\Ui`dghUXh`]a`=fUb
_Y]b`_Y]bYg`BYgh`=a`š\ f`&\$%)`j`YfnY]W bYhY`X]Y`GhUXhY]bYb
<]hnY]bXYI`fY]bY`?ca`V]bUh]cb`Ui`g`@`ZhYa`dYfUhi`f`i`bX
@`ZhZi`W`h][`_Y]h`j`cb`+(`...7`f%*)`...: Ł`XYf`nk`Y]h\0W ghY
<]hnY]bXYI`ž`XYf`Ya`U`g`Ui`Z`XYf`9fXY`[`Ya`YggYb`k`i`fXY"

8 Ug\h!Y`@cchž`=fUb

`U`h1` \Y]» YghYb`C fhY`Ui`Z`XYf`9fXY`@`h`K`0ghY` 2`HfUi`a`nY]h`8]Y`@`h!
K`0ghY`k`Uf`Z0bZ]`cb`g]YVYb`š\ fYb`XYf`\Y]» YghY`C fhY`XYf`9fXY"

8]Y`8Ug\h!Y`@cch!`cXYf`@`h!`K`0ghY`VY\YfVYf[`h`a`cbXÅ\b`]WXY
@UbXgWUZhYb`i`bX`Y]bY`FY]\Y`[`Yc`c[]gWXYf`D\Åbca`YbYž`XUfi`bhYf
GU`nYVYbYbž`A`YhYcf]hYbZY`XYf`i`bX`f]Yg][`Y`bUh0f`]WXY
GUbXVi`f[`Ybž`X]Y`?U`i`hg`[`YbUbb`h`k`YfXYb"

@Ui h`B5G5`k Uf`XjY`@i h`K ØghY`ZØf`ZØbZ`j cb`g]YVYb`>U\`fYbž`]b
XYbYb`nk`]gW`Yb`&\$`\$` `i bX`&\$`\$`-`GUhY``]hYbXUhYb`Ui Z[`YnY]W`bYh
k`i fXYbž`XYf`\`Y]» YghY`C fh`XYf`9fXY``8`]Y`\`ÒW`ghY
; YgUa`hhYa`dYfUhi`f`VYhfi`[`+`\$`ž`+`...7`fP%)`-`ž` `...: `Ł`ž`[`Ya`YggYb`]a
>U\`f`&\$`\$`)"`

E i YYbg`UbXž`5i ghfU`]Yb

`U`h1` `8`]Y`\`Y]» YghYb`C fhY`XYf`9fXY`7G`F`C`E`i`YYbg`UbX` `2`7G`F`C`/
77`6MG5`&`\$`E`i`YYbg`UbX`\`Uh`X]Y`\`ÒW`ghY`Xi`fW`gW`b]h`h]W`X`Y
A`U`I`]a`U`hYa`dYfUhi`f`U``Yf`Ui`ghfU`]gW`Yb`6i`bXYgghUUhYb`

⇒ `>U\`f`&\$`\$` `nY]W`bYhYb`B5G5!GUhY``]hYb`]b`XYb`6UX`UbXg`j`cb
E`i`YYbg`UbXž`5i`ghfU`]Ybž`Y]bY`HYa`dYfUhi`f`j`cb`*`-`ž` `...7`fP%)`*`ž`+` `...: `Ł
Ui`Z`8`Yf`6i`bXYgghUUh`E`i`YYbg`UbX`\`Uh`X]Y`\`ÒW`ghY
Xi`fW`gW`b]h`h]W`X`Y`<`ÒW`ghhYa`dYfUhi`f`U``Yf`Ui`ghfU`]gW`Yb
6i`bXYgghUUhYb``E`i`YYbg`UbX`]gh`5i`ghfU`]Ybg
nk`Y]hVYj`Ò`_Yfi`b[`gfY]W`ghYf`GhUUž`UVYf`bi`f`g]YVYb`gY]bYf
6Yj`Ò`_Yfi`b[`gnYbhfYb`\`UVYb`_Y]bY`HYa`dYfUhi`f`ØVYf`(\$` `...7`fP%)`(\$`
...: `Ł`[`Ya`YggYb`"

5 n]n]mUž`@]V mY b

`U`h1` `8`]Y`\`Y]» YghYb`C fhY`XYf`9fXY`ZU]fi`gY`cfUb[`Yga`]`Y
`]V`mYb` `2`C`fUb[`Yb`ÀW`Y`b`/:`U]fY`Bi`hni`b[` `b`5n]n]mU\`k`i`fXY`Y]b
<`ÒW`ghk`Yfhj`cb`),` `...7`fP%)`*`ž`(` `...: `Ł`[`Ya`Y`XYh`

-`\$`>U\`fY``Ub[`\`]Y`h`X]Y`GhUXh`5n]n]mU\`ž`(\$`_a`f&)`A`Y]YbŁ`gØX`]W`
j`cb`Hf]dc`]gž`XYb`FY`_cfX`XYg`\`Y]» YghYb`C fhYg`XYf`9fXY``%-`&&
k`i`fXY`X]Y`HYa`dYfUhi`f`a`]h`),` `...7`fP%)`*`ž`(` `...: `Ł`[`Ya`YggYb``8`]Y
6Y\`Ui`dhi`b[`k`i`fXY`YXcW`k`]YXYf`c`h`VYghf]hYb`fb]W`h`ni`Y`hnh
j`cb`XYbYb`]b`8`YUh`J`U``Ymž`?`U`]Z`cfb]YbŁ`"

I`b[`YUW`hYh`XYggYb`]gh`5n]n]mU\`i`bVYghf]hYb`gY`fž`gY`f`\`Y]» "`
J`Yf]Z]n]YfhY`A`Yggk`YfhY`\`UVYb`Y]b`FY`_cfX`cW`j`cb`)*` `...7`fP%)`&ž`
...: `Ł`i`bX`Y]b`8i`fW`gW`b]h`hg`cW`j`cb`(`+`ž`(` `...7`fP%`+`ž`(` `...: `Ł`VYgh`Àh][`hž`
k`Ug`VYXYi`hYhž`XUgg`X]Y`GhUXh`Y]bYf`XYf`\`Y]» YghYb`C fhY`XYf`9fXY`
V`Y]Vh`"

8 YUh\ 'J U`Ymž' ? U`]Zc fb]Yb ž' l G5

'U`h1 8 YUh\ 'J U`Ym\Y]» YghY`C fhY`XYf`9fXY` 2 HfUi a nY]h': i fbUWw
7fYY_]a '8 YUh\ 'J U`Ym\`Ä`h`XYb`FY`_cfX`ZØf`X]Y`\`ÖW`ghY`
ni j Yf`Ägg][`Ui Z[YnY]W`bYhY`@ ZhYa dYfUhi f`

8 Ug`]b`? U`]Zc fb]Yb`[Y`Y[YbY`8 YUh\ 'J U`Ym]gh`X]Y`< Y]a Uhj`cb
: i fbUWw`7fYY`_ž`XUg`XYb`FY`_cfX`ZØf`X]Y`\`ÖW`ghY`ni j Yf`Ägg][
Ui Z[YnY]W`bYhY`@ ZhYa dYfUhi f`XYf`K`Y`h`\`Ä`h`) *ž+`...7`fP%` (`...: Ł
Ua`'f%`" `ž`]`%-`%` "'8 YUh\ 'J U`Ym\`Ä`h`Ui`W`X`Yb`FY`_cfX`ZØf`X]Y`
b]YXf][`ghY`Di`b`_h]b`B`cfX`Ua`Yf]_U`VY]`, *`a`f&, &`Zh`i`bhYf`XYa`
A`YYfY`ggd]Y[Y`i`b`X`XYf`hfc`W`Yb`ghY`C`fh]b`B`cfX`Ua`Yf]_U`a`]h`i`b`f` ,
a`a`f`P%ž`'Nc``Ł`B]Y`XYfg`W`U[`d`f`c`ž`U`f`"

? YV]`]ž`Hi`bYg]Yb

'U`h1 8]Y`\Y]» YghYb`C fhY`XYf`K`Y`h`
Hi`bYg]Yb` 2 /77`6MG5`&`\$`A`cbUh]W`Y`
8 i fW`gW`b]hghYa`dYfUhi`fYb`]b`? YV]`]ØVYfghY][`Yb`fY[Y`a`Ä»][
(`\$`..7`fP%\$(`... Ł`

8]Y`C`UgYb`ghUXh`? YV]`]a`]hYb`]b`XYf`hi`bYg]gW`Yb`K`ØghY`k`ÄfY`ZUgh
i`bUi`ZZ`Ä`][`ž`k`ÄfYb`XU`b]W`h`X]Y`gYb[YbXYb`HYa`dYfUhi`fYb`"8]Y`
ZfUbn`Øg]gW`Yb`?`c`cb]U`VY`\`ØfXYb`XYg`GYfj`]W`A`Ä`h`Ä`c`f`c`c`[`]ei`Y`XY`
Hi`b]g`nY][`Yb`Y]b`FY`_cfX`\`c`W`j`cb`))`..7`fP%`%`... Ł`a`]h`a`cbUh]W`Yb`
8 i fW`gW`b]hghk`Yf`hYb`j`cb`fY[Y`a`Ä»][`ØVYf`(`\$`..7`fP%\$(`... Ł`"

K UX]`< U`ZUž`Gi`XUb

'U`h1 8]Y`\Y]» YghYb`C fhY`XYf`9fXY`6YfhfUa`n`K`UX]
<U`ZU` 2 6YfhfUa`n`/77`6MG5`&`\$`K`UX]`<U`ZU`Yf`\`Ä`h`k`Yb][`Yf`U`g`
Y]bYb`A`j`]a`YhYf`B]Y`XYfg`W`U[`]b`Y]bYa`ž`U`f`

K UX]`<U`ZU`]Y[`h`Ua`i`Z`Yf`XYg`Bi`V]YbgYYg`i`bX`[`Yb]Y»`h`
Xi`fW`gW`b]h]W`Y`ž`b]hYa`dYfUhi`fYb`j`cb`(`%ž%`..7`fP%\$`*`... Ł`" `a`
5df]`%-`*`+`k`i`fXY`Y]b`<`ÖW`ghk`Yf`h`j`cb`)`'`...7`fP%`&`+`ž`(`...: Ł`
[`Ya`YggYb`" `a`@Ui`Z`Y`Y]bYg`ž`U`f`Yg`Yf`\`Ä`h`K`UX]`<U`ZU`k`Yb][`Yf`U`g`

Y]bYb`A]`ja YhYf`B]YXYfgW`U["

NU\`Yb`XYf`BUh]cbU`C VW Ub]WUbX`5ha cgd\Yf]W5Xa]b]ghfUh]cb
XYi hYb`XUfUi Z`\]bž`XUgg`nY`b`j`cb`%&`A`cbUhYb`j`c`gh`bX][
hfcW_Yb`g]bXž`a]h`bi`f`\$ž*`a`a`f`\$ž\$&(`Nc`Ł`B]YXYfgW`U[`]a
[UbnYb`đ\`f"

H]fUh`Nk]ž`=gfUY`

`U`h1 8]Y`\Y]»YghYb`CfhY`XYf`9fXYž
: U]f!l gY!`=gfUY` 2 f]WYgh`]ZYghmY"WŁa /: U]fY`Bi`hni`b[`Bi`f`fi`bX
, \$`A`YbgW`Yb`YVYb`]b`H]fUh`Hnj]

H]fUh`Hnj]ž`Y]bY`_`Y]bY`]gfUY`]gW`Y`GhUXhž`X]Y`Z0f`XYb`5bVUi`j`cb
8UhY`b`VY`_Ubbh`]ghž`j`YfnY]W`bYhY`%- (`&`X]Y`\0W`ghY`HYa`dYfUhi`fž
X]Y`Ya`U`g]b`5g]Yb`[`Ya`YggYb`k`i`fXY.`)`'`...7`fP%&`,`...: `Ł`8]Y`GhUXh
`]Y[`h`i`&`\$`a`f`+`&`&: `i`»`Ł`i`bhYf`XYa`A`YYfYggd]Y[`Y`]b`XYf`B`A`Y`XYg
: `i`ggYg`æ`fXUb`i`bX`=gfUY`!`æ`fXUb]gW`Y`;`fYbnY"

Bi`f`Y`hk`U`,`\$\$`A`YbgW`Yb`YVYb`]b`XYf`GhUXh`G]Y`0VYf`YVYbž
]bXYa`g]Y`X]Y`bU`Y[`Y`Y[`YbYb`bUh0f`]W`Yb`E`i`Y`VYW_Yb`bi`hnYbž
i`a`g]W`]b`XYf`i`bYfV]hh`]W`Yb`<]hnY`UVni`_0\`Yb"

: `Ua`a`YbXY`6Yf[`Yž`7\]bU

`U`h1 8]Y`\Y]»YghYb`CfhY`XYf`9fXY`7c`Y[`chU`ZU`a]b[
a`ci`bhU]bg`2`7c`Y[`chU/`77`6MG5`&`\$`:`Ua`]b[`A`ci`bhU]bg`]gh`XYf
\Y]»YghY`C`fh`]b`7\]bU

G]Y`bYbbYb`g]Y`b]W`hi`a`gcbgh`X]Y`:`Ua`a`YbXYb`6Yf[`Y`8`Ug`fUi`Y
6Yf[`_]a`Už`XUg`c`_U`U`g`;`UcW`Ub[`!`;`YV]f[`Y`VY`_Ubbh`]ghž`Y`XYh
i`bhYf`Yi`hfYa`c`Yb`Gca`a`YfhYa`dYfUhi`fYbž`k`Ug`XUg`;`YV]Yh`ni`a
\Y]»YghYb`C`fh`]b`7\]bU`a`UW`h"

8]Y`HYa`dYfUhi`fYb`0VYfgW`fY]hYb`\`Ai`Z[(`)`\$`..7`fP%&`,`...`Ł`i`b`X`Yg
[`]Vh`gc[`Uf`<]bk`Y]gY`XUfUi`Zž`XUgg`g]Y`V]g`ni`,`\$`..7`fP%+)`'`...`Ł
YffY]W`Ybž`k`Ug`X]Y`_Uf[`Yž`YfcX]YfhY`@UbXgW`UZh`Ui`g`f`chYa
GUbXghY]b`ni`Y]bYa`XYf`\Y]»YghYb`C`fhY`XYf`9fXY`a`UW`h"

H]a Vi _hi ž'A U`]

`U`h1 I bVY_UbbhY`UfW\]hY_hcb]gW\Y`K i bXYf`A U`]'`% 2 HfUi a nY]h
8]Y`8i fW\gW\ b]hhghYa dYfUhi fYb`]b`A U`]ØVYfghY][Yb`fY[Y`a Å»][
(\$..7`fP%\$(... Ł

8]Y`Ubh]_Y`GhUXh`H]a Vi _hi`_]gh`b]W\h`bi f`j ca`'Øb[ghYb`?cbZ]_h]b
A U`]VYXfc`h"5b`XYf`?fYi ni b[`XYf`U`hYb`<UbXY`gfc i hYb`XYf
GU\UfU`[Y`Y[Ybž`]gh`H]a Vi _hi`Ui W\`j cb`K ØghYbV]`Xi b[`VYXfc`h"

5b[Y[f]ZZYb`j cb`XYf`j cfXf]b[YbXYb`GU\UfUž`ØVYfghY][Yb`X]Y
8i fW\gW\ b]hhghYa dYfUhi fYb`fY[Y`a Å»][`(\$..7`fP%\$(... Łž`k cVY]`XUg
A UI]a i a`(- ..7`fP%&\$ž&... Ł`YffY]W\h"

`U`h1 2

@Y]hV]`X.`8fYUa gh]a Y

.

8YhU]`g

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